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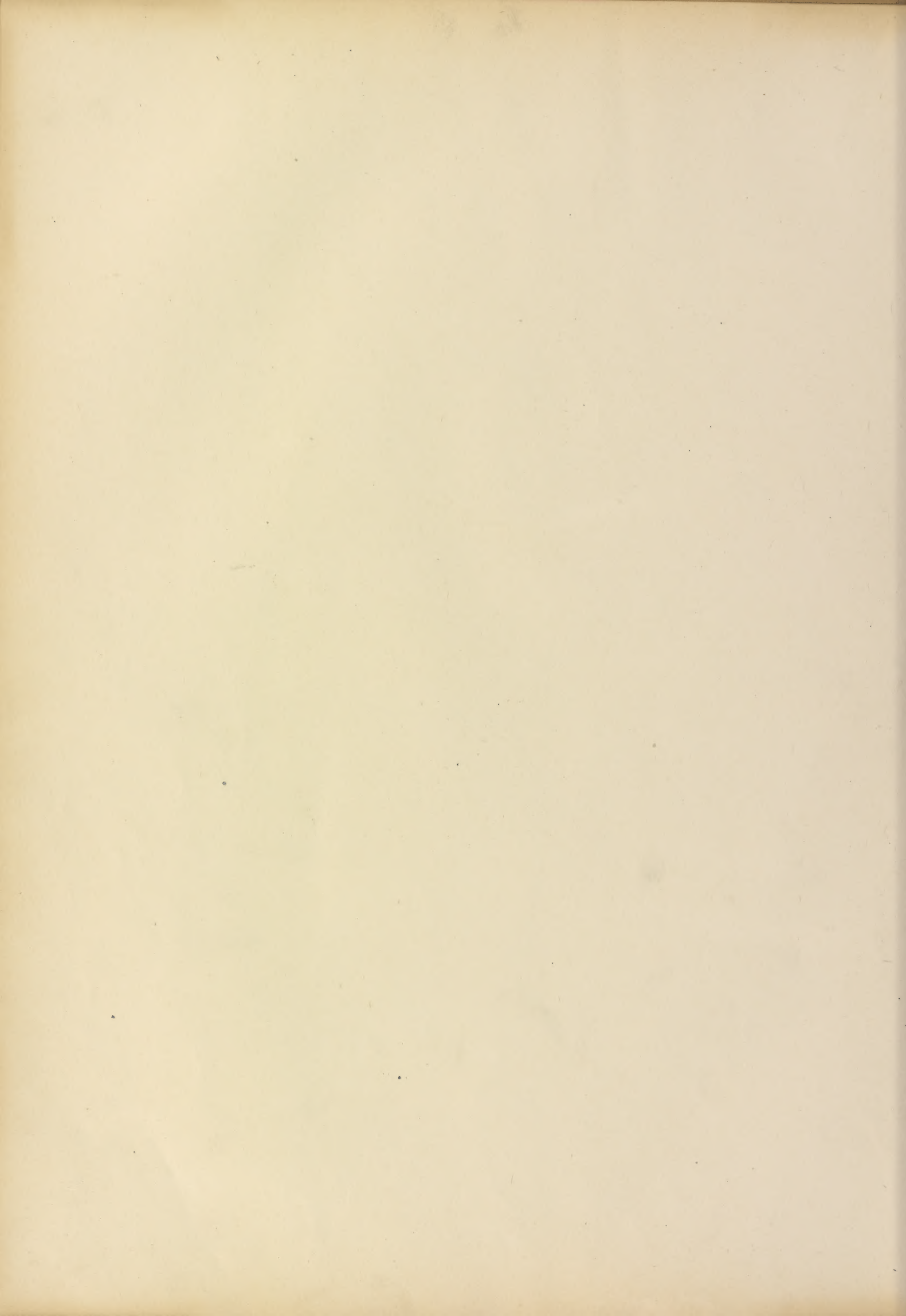


BOOK NUMBER 312  
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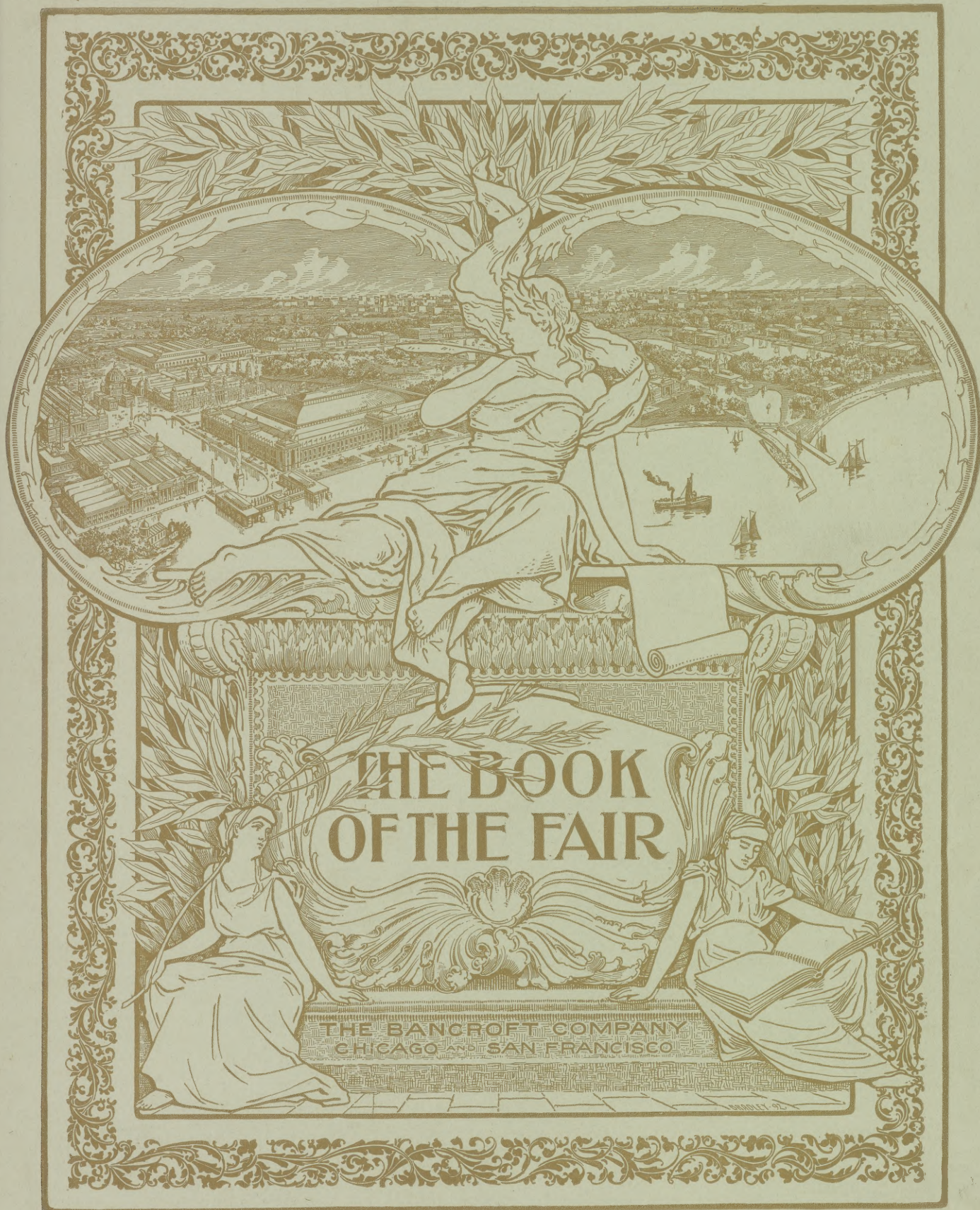


Bancroft, Hubert Howe, 1832-1918.  
The book of the fair...

*N. Lucas*

PART TWELVE.

PRICE ONE DOLLAR





# FINE EDITIONS OF THE BOOK OF THE FAIR

BY HUBERT HOWE BANCROFT

Besides the Popular Edition of THE BOOK OF THE FAIR, in 25 parts of 40 pages each, at \$1 a part, there are four fine editions, as follows:

## *The Author's Edition*

From first impression of plates made specially for the fine editions; each copy signed by the author, and proof plates signed by the artists; in ten sections, limited to 150 copies, numbered, and the limit strictly guaranteed by the publishers. This edition is nearly exhausted; its value is rapidly increasing, and copies will soon be sought for at double the original subscription price.

## *Edition de Luxe*

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## *Fin de Siècle Edition*

In ten sections, limited and numbered.

## *Columbian Edition*

In ten sections, limited and numbered.

It is admitted by all that never was there gathered within equal area so much of what the world contains of beauty and utility, so many of the highest achievements of artist and artisan, so much that charms and comforts, that makes happy the home and life of man, as in Jackson Park, Chicago, in the year 1893. Palaces existing hitherto only in the dreams of their artificers, reared amid skilful combinations of landscape vistas, lakes and water ways alternating with spacious avenues and boulevards, fringed with flowers and foliage, and all uniting to show what man and nature can do at their best, were filled with the latest and most costly productions of ingenuity and skill, the sum total of human accomplishments in art and industry, in war, government, and commerce, in science and education, and in all the elements of intellectual refinement.

The publishers of THE BOOK OF THE FAIR claim, and thousands of artists, editors, and scholars throughout America and Europe testify to the same,—that the book does justice to the subject; that in the plan, arrangement, clearness, and conciseness of the text, and the accuracy and beauty of the illustrations, they have not only done better than any one else, but the best that can be done within properly prescribed limits.

But from those who can fully appreciate it, and possess the means to gratify artistic tastes, this greatest of civic displays is worthy of something more than the encouragement of a merely popular work, however interesting and intrinsically valuable it may be. To patrons of the fine arts, the world has owed much, but it will ever owe more to those whose encouragement alone will make it possible suitably to array, in artistic forms and colors, the gems of this imperial display.

In the accomplishment of their purpose to render THE BOOK OF THE FAIR in the highest sense an art work as well as a work of art, the publishers called to their aid artists of highest repute, and invited each to select one or more subjects within the Exposition grounds, such as best accorded with his special line of art; and hence, such as he would be able to reproduce with finest effect.

That the author and publishers have stepped somewhat aside from the beaten path of art works, in thus combining, as they do, beauty and utility in their choicest forms, is an innovation welcomed by the cultured classes of whom their patrons consist. In this greatest of international expositions, some of the most beautiful groups were among the useful; and, hereafter, science, art, and industry, beauty and utility, are destined to be one and inseparable.

The letter press of these editions of THE BOOK OF THE FAIR is printed on the finest of enamelled paper, from type made especially for this work, and never before used, and when folded is 14 by 18 inches in size. Interwoven with the text are two thousand and more photo-engravings, done on copper, in the plant established by the publishers of this work, with the latest new machinery, and by the most improved processes; besides which there is a series of selected subjects in fac-simile water colors, etchings, and photogravures, by such artists as Thule de Thulstrup, F. D. Millet, H. F. Farny, Louis K. Harlow, H. D. Nichols, Charles Mente, Jules Guerin, Louis Meynelle, C. Harry Eaton, W. J. Whittemore, Peter Waltze, Alfred F. Willett, J. Lauber, F. Hopkinson Smith, C. F. W. Mielatz, Joseph Fagan, Rene de Quelin, and others.

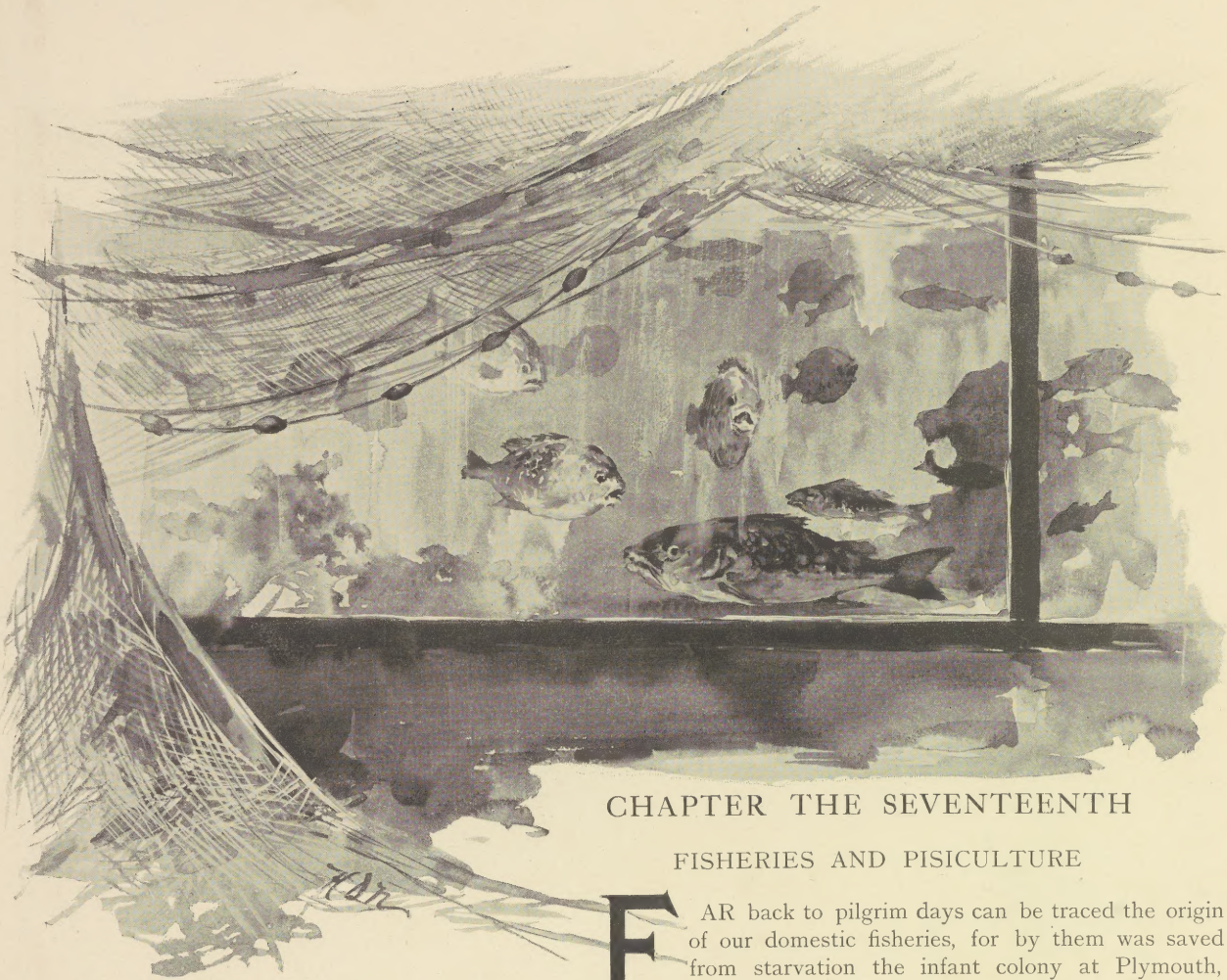
These illustrations are original paintings, executed on the World's Fair grounds by these artists, especially for this publication. They form a beautiful gallery of World's Fair subjects, and the collection can only be secured in THE BOOK OF THE FAIR. The paintings have a special value apart from their artistic beauty, representing as they do objects from which drawings direct can never again be made; nor can these drawings ever be duplicated, as they are the exclusive copyright property of the publishers, to be used only in this work, and the plates and processes of reproduction are destroyed immediately the requisite number of copies are struck off. One noticeable feature of the collection is that it is not the work of one artist alone, but of a score or two of representative painters and etchers, thus securing variety, and lending additional value to the work, giving it a freshness and novelty which it would not otherwise possess; each subject being a delightful study in itself, and displaying the individuality and characteristic methods of the artist. Thus is this greatest of all international expositions placed upon canvas, and embalmed in book form, there to be preserved in beautiful forms and fadeless colors to the end of time.

THE BANCROFT COMPANY, Publishers,

AUDITORIUM BUILDING, CHICAGO, ILL.

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## CHAPTER THE SEVENTEENTH

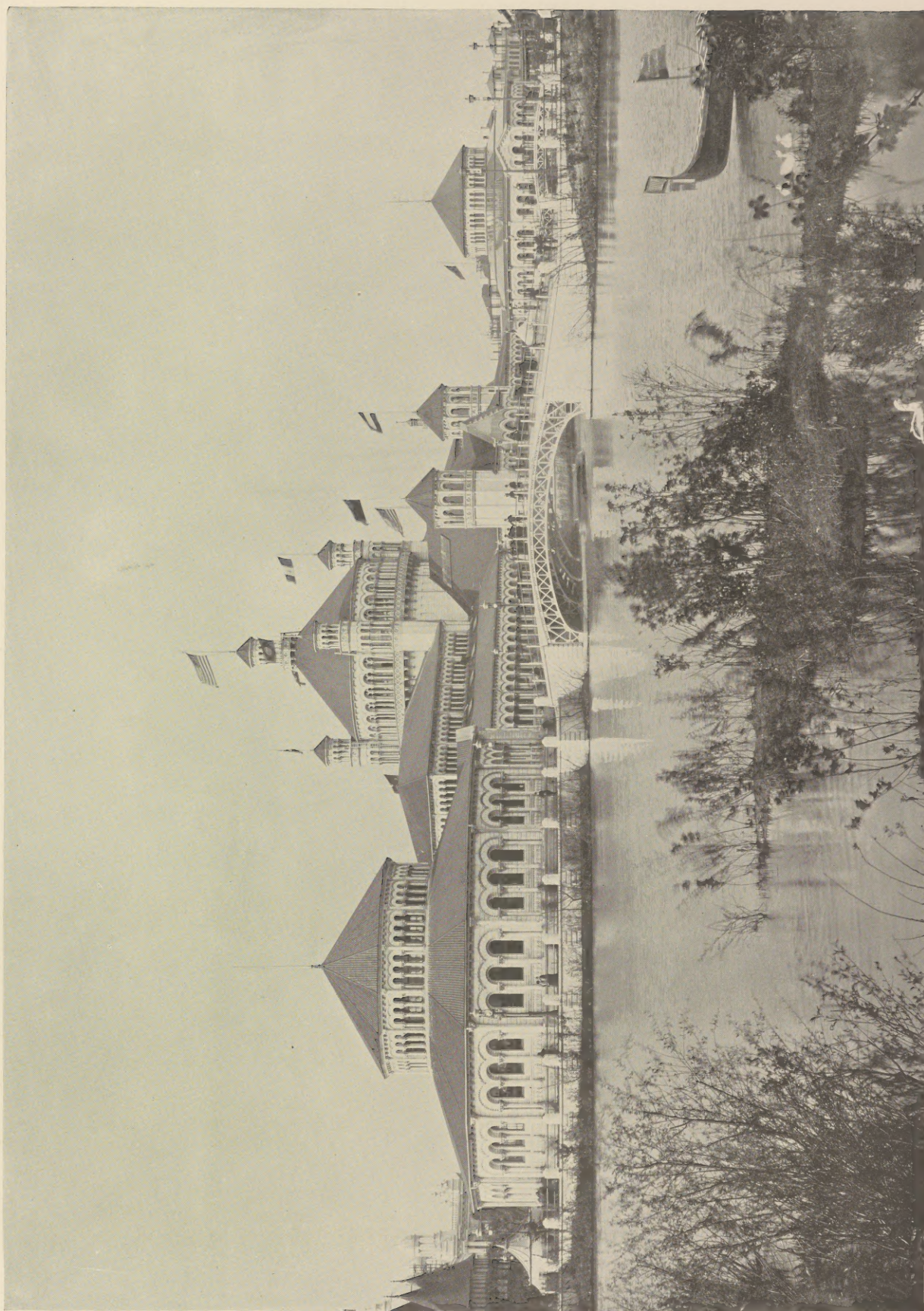
### FISHERIES AND PISCICULTURE

**F**AR back to pilgrim days can be traced the origin of our domestic fisheries, for by them was saved from starvation the infant colony at Plymouth, and by their proceeds were supported the first public schools established on New England shores. Some two years before the *Mayflower* bore westward the fathers of the republic, a company of Puritans, returning from their sojourn in the Netherlands, besought King James for permission to found an American colony. "What profit might arise," inquired his majesty. "Fishing," was the answer, in a single word. "So God have my soul, 'tis an honest trade; 'twas the apostles' own calling." Such was the monarch's decision, and so the permission was granted.

Except for despatching a ship in 1624 to establish a fishing station at Cape Ann, the Plymouth colony took no active part in the earlier development of American fisheries. This station they abandoned after a single season, and, as is related, their vessels, "well laden, went joyfully home together, ye master of ye larger ship towing ye lesser ship at his sterne, all ye way overbound." Meanwhile had been shipped from that point, in the previous year, the first cargo of fish for European markets. Thenceforth the industry grew apace, until, at the outbreak of the revolutionary war, there were more than 500 fishing craft belonging to Massachusetts ports alone, their total catch being valued at \$750,000. Then came further troubles, followed by the war of 1812, and almost from that date until the settlement of the Bering sea controversy, progress has been retarded by foreign complications and injudicious legislation. Many a time has the remark been made that "our fishermen are always bringing trouble on the government." Rather should it be said that the government is ever bringing trouble on our fishermen. But notwithstanding all obstacles, the yield of fisheries has attained to mammoth proportions, and now for the first time in the annals of international expositions, this industry, with all its adjuncts, finds adequate representation in a home of its own.

In the Fisheries division of the Fair are included many branches, in addition to such as relate to the quest and capture of animals and plants whose home is in the water, entirely or in part. In the official classification are included fish and other forms of aquatic life; sea fishing and angling; fresh water fishing and angling; the products of the fisheries and their manipulation, and fish culture. In addition to the United States are represented nearly all nationalities among whom fishing is a prominent industry, from New Brunswick to New South Wales, the harvest of sea, river, and lake, "gathered," as has been said, "in wasteful fashion from a crop that is neither sown nor tended," amounting annually to more than 2,000,000 tons, and affording direct employment to at least 1,000,000 men and 200,000 vessels. In the United States the take of fish exceeds 250,000 tons a year, of which about one-fourth comes from the waters of the great lakes, with a large production from Atlantic and Pacific grounds, while the whale and seal fisheries still produce largely, though with a steadily diminishing yield. As to the fisheries of other lands, brief mention will be made in connection with their exhibits in this department.





FISHERIES BUILDING, FROM WOODED ISLAND





FISHERIES BUILDING

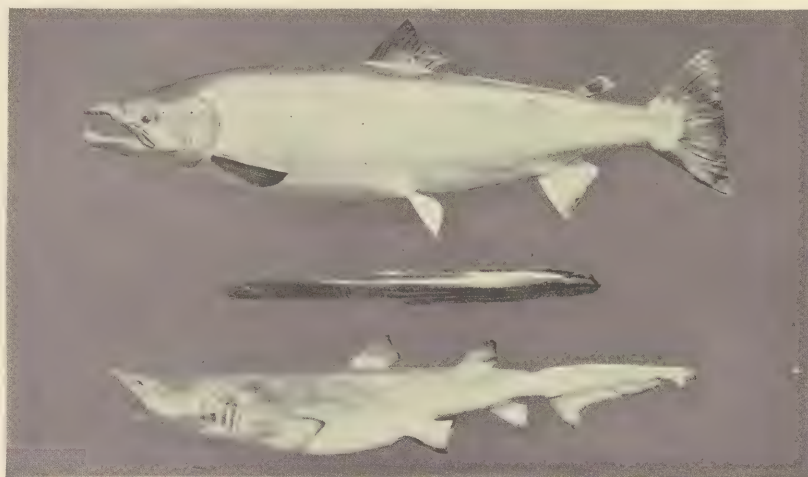
Facing in front an arm of the lagoon by which it is separated from the government building, and with one of its polygonal annexes bordered by a miniature estuary opening into the lake, the Fisheries pavilion raises its clear-cut outlines against the sky. In the fantastic design of this edifice, or rather group of edifices, we have somewhat of a relief from the architectural classicism of its environment. By his brethren of the craft, this composition, with its opulence of decorative features, conceived by Henry Ives Cobb, has been pronounced "an architectural poem." However this may be, it is certain that Mr Cobb has given us a structure admirably suited to its several purposes; one that, in treatment, not only departs from the conventional style of its neighbors, but, as with the Horticultural hall, is of itself an illustration of the uses for which it was built.

In the main edifice, devoted to fisheries in general, to pisciculture and scientific investigation, we have a rectangular structure of no special order of architecture, though based on the southern Romanesque, in length 365 feet, with a width between the entrance of 242 feet, and between the outside walls of about two-thirds of the latter space. Through the centre runs a spacious hall, 280 by 80 feet, lighted by clear-story windows, and around which is a continuous aisle, occupying the remainder of the floor space. Above are galleries, also encircling the entire structure, and increasing its exhibiting space

to a total of 60,000 square feet. To give accent to its low, long curtain walls, the roofs, of glazed Spanish tile, were so constructed as to slope sharply to a central ridge. Surmounting them is a circular tower, over the centre of the nave, in diameter co-equal with its width, and around which are turrets, with staircases leading to the gallery and to an exterior balcony. Above the tower is a clear-story stage, also flanked by turrets, and above all, rising to a height of 150 feet, is a conical roof, capped with a belvedere, around the base of which is still another gallery. At the principal entrances, in the centre of the main façades, are pavilions projecting from the outside walls, adorned with sculpture work and statuary typical of the fisherman's craft. In the entire structure, with its double row of columns, their capitals depicting in endless groups all forms of life contained in sea or river, we have rather a playful delicacy than such grandeur of design as some might deem in keeping with its proportions. In this and other points the Fisheries buildings differ essentially from most of their neighbors; but with a difference to which none but the most captious of critics will take exception.

In preparing his decorative scheme, the architect has produced some four-score models of columnar ornamentation, each of different and yet of conventional pattern. If in many of them there is found a strong

element of the ludicrous and grotesque, it is only in keeping with the playfulness of design, and by no means detracts from the merit of composition. Rather does it serve, as one of his confrères remarks, "to make it



SALMON. EEL. LAND SHARK

joyous and festive, without loss of dignity, grace, and fitness." Perhaps in none of the Exposition buildings have their artificers displayed a more striking originality of treatment, and that without treading on the dangerous ground of inventing new forms of architectural expression.

East of the principal edifice, in the direction of the lake, is the aquarium building, connected with it, as is the one devoted to angling exhibits, by a curved projecting corridor, so that the Fisheries hall appears to set back from its two flanking pavilions. The latter are of octagonal shape and somewhat similar design, the one containing the aquaria with clear-story windows and glass-roofed circular aisles in concentric arcs, surrounding and connected by arcades with a central rotunda, where, from the crevices of moss-covered rocks, rise jets of water in miniature fountains, descending in spray to the basin below. Here is a choice collection of aquatic plants, and of goldfish and other ornamental specimens. In the salt and fresh-water aquaria, which are ten in number, are displayed nearly all the known varieties that people sea or river. As to the dimensions of these aquaria, it need only be said that their capacity ranges from 7,000 to 27,000 gallons, and with a total of 140,000 gallons, apart from reservoirs and water circulation.

Southward, the main façade of the Fisheries hall faces toward the Government building, in the northern end of which are the exhibits of the United States fish commission, thus grouping in one display all the wonders of the great deep, and including river fisheries, pisciculture, and other branches presently to be mentioned. While at several of our great world's fairs there have been similar collections on a smaller scale, they have for the most part been scattered among other departments, and therefore wanting in unity and expression. Here, in accordance with the clause in the congressional act which provides for an exhibition of "the products of soil, mine, and sea", is for the first time afforded an ample and continuous illustration of aquatic industry and science. Nor is there any good reason why this industry, aptly termed the mother of commerce, and in many

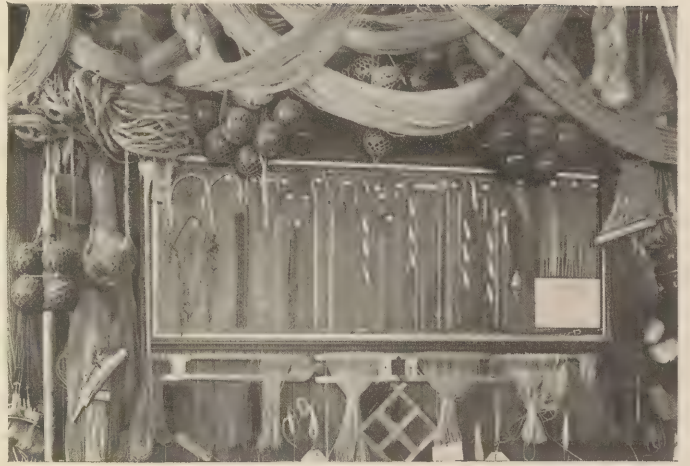
countries a prominent source of wealth, should not be fully represented at the Columbian Exposition. Still more appropriate would appear the emphasis given to this division, when it is remembered that fishing was one of the favorite pursuits of the native races of America,



HERRING FISHING IN NORWAY

and that to their conquerors the pearl fisheries of the Isthmus were prizes coveted more eagerly than gold itself.

In the department of Fisheries is not only displayed in complete and interesting form their present condition, whether from a scientific or commercial point of view, but in a series of object lessons is portrayed their history for at least four centuries of the past. Almost side by side are the primitive apparatus of the savage, and the most approved appliances and methods evolved by many cycles of scientific progress. Here also are the laws and regulations, the reports and statistics, pertaining to fisheries. As to the fish themselves, there are few species that are not here represented, from the minnow to monsters of the deep, with river and shell fish of every kind, and with fish-eating birds, mounted on frames or preserved in alcohol. Of fish and fish stories described on canvas there is no lack, many of them depicted by artists of more than national repute.

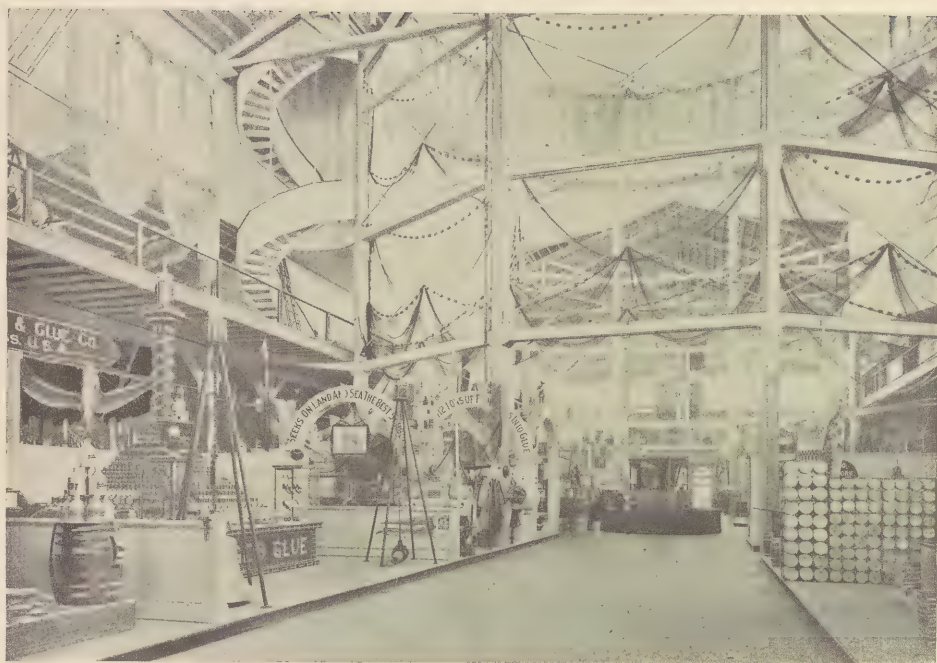


HOOKS AND LINES.



EXHIBIT OF FISH NETS.





INTERIOR VIEW FISHERIES BUILDING

proximity, are fishermen's camps, constructed of logs or canvas.

The centre of attraction is the exhibit of live fish in the aquarium building, where in tanks arranged in concentric circles is the largest collection of sea and fresh-water specimens in the world, except for the one contained in the Brighton aquaria on the southern coast of England. This was contributed by the United States fish commission, whose object was to present the best possible picture of fish-life, especially of the interior waters of America, and at the same time to illustrate the operations of the commission. While seeking to make it of educational value, everything has been done to show the different species in the most attractive form. That this is one of the most popular departments of the Exposition is attested by the crowds which daily inspect the many odd-looking specimens brought from ocean's depths and inland streams. To young and old it has proved a delight, and is studied by thousands who have never been within sight of ocean, and to whom the stories of the great deep are as the marvels of tradition.

The first point of interest is the pool in the centre with its gold fish and other bright hued specimens. The groups of stalactites from which a supply of fresh water is constantly dripping into the basin are in tasteful design. Here also are numerous specimens of rock, marine vegetation, and mounds of aquatic and semi-aquatic plants. Between the central basin and the circles of tanks are passage-ways six feet in width, the tanks numbering 50 in all, of which about two-thirds contain the fresh-water species to the right of the southern portal. They vary in length from six to 50 feet, with a total glass frontage of nearly 600 feet, and with 3,000 square feet of surface. Their decorations resemble those where the gold-fish are domiciled, with miniature mountains and caves made of a lime-like substance, called calcareous tufa, from the springs near Toledo, Ohio, while vegetable matter coated with lime-stone is wrought in fantastic designs. In building these tiny grottoes and reefs, a dark cement has been used, and the holes and corners are filled with dark earth, in which aquatic plants are deposited.

In the fresh water sections are all the species inhabiting the great lakes, rivers, and their tributaries throughout the United States. Here are beautiful specimens of lake trout, brook trout, rainbow trout, carp, tench, pike, black bass, many kinds of suckers, cat-fish, dog-fish gars, and minnows. Of gold-fish, the most attractive are the Chinese variety, with fan-like transparent tail, while the most handsome tank is that which contains the golden ide, of the carp family, indigenous to European rivers. In an aquarium 70 feet long by 12 in width are shown the largest specimens of the Mississippi basin and the great lakes, as the sturgeon, pickerel, cat-fish, white-fish, and bass. From inland waters are also the shovel-fish, lake herring, buffalo-fish, perch, and others. Then there are separate tanks for all fish indigenous to the Atlantic slope east of the Alleghany mountains. Here are in full splendor every species of edible and

In the angling department is a long array of rods, reels, tackle, and other appliances, showing the progress made in its various branches, and such as of itself forms a history of the pursuit which Walton ranked among the liberal arts. Of flies there are several exhibits, among the most interesting of which is the process of their manufacture by men and women actually at work on these delicate fabrics. Other kinds of artificial bait are also displayed in great variety; and near them is a collection of all such articles as pertain to the angler's outfit, while on the banks of the lagoon, in close



CANADIAN FISHER BOY



commercial fish, with almost all the curious and hideous specimens in the waters of the United States, as well as a vast number of foreign species. There are the von behr from Germany, and the Lochleven trout from Scotland, as well as rainbow trout from California, black spotted trout from the Rocky mountains, and brook trout from every mountain stream in the republic. The different varieties of carp occupy a separate tank; and in this collection a most interesting fish to naturalists is the spoon-bill, or paddle fish, the only

species of the genus, and the only genus of the family polyodontidæ in the world, and one that has never before been successfully preserved in an aquarium. In addition to aquatic plants, the fresh water tanks are well supplied with all kinds of water life, old logs being planted across the crevices, not only for the benefit of the fish, but to give to the surroundings a realistic appearance. The special design has been to make the environment in all cases correspond as far as possible with the habitat of the occupant, both as to fresh-water and marine exhibits.

The marine collection has been gathered from great distances, ranging from Atlantic to Pacific shores.



HORSE MACKEREL



FISH NETS

Three classes are represented; food, ornamental, and monster fishes. Tongued cod, spotted croker, pompano, tautog, sheeps-head, toad fish, sea robins, sharks, skate, porgies, and mummichogs are among the specimens of every important species known to science. Divers have searched the ocean for the rare forms of plant life which adorn the tanks, growing as in their native beds. Resting placidly on rocks and sands are crabs, lobsters, turtles, sea anemones, terrapins, snakes, and other invertebrates. Elsewhere are shrimps, snails, whelks; and there is a collection of such varieties as the sea-horse, trunk-fish, and puff-fish, the last the most repulsive in all the marine aquaria, covered with sharp spikes similar to the porcupine-fish. A peculiar specimen is the so-called nursing fish, with a wavy appendage several feet in width.

The fresh water specimens are supplied with filtered water, kept at a temperature to suit their natural habits. The salt water is conducted in rubber tubes to a filter placed in the cellar and containing stones, gravel, and sand as in nature, and is then run off into a cistern with a capacity of about 60,000 gallons. A duplicate set of pumps operated by electric dynamos drives the water into a reservoir at the top of the building, whence it flows back into the aquaria. The stream carries enough air with it to aerate the water and enable the fish to breathe. Another method of aerating is by aquatic plants, which are continually giving off oxygen, and absorbing the



NET EXHIBIT

carbonic gas generated by respiration. The fish are well fed, and thrive better than could be expected, crowded as they are in cruel fashion within the narrowest of space, in a collection that appears to be needlessly duplicated.

In the main Fisheries building we will begin with one of its smallest and yet most interesting exhibits. This is contained in a small glass case near the southern entrance, and consists of a collection of shells, fashioned by a Memphis contributor into pansies, bouquets, bracelets, and other fantastic forms. Thence extends along the main floor and the southern gallery, the largest display of nets, seines, and twines that has ever been brought together. This is by the American Net and Twine company of Boston, in the centre of whose enclosure is a pavilion containing an infinite variety of specimens. A portion of the enclosure is covered with a net of ample proportions, beneath which is a miniature pound net, resembling in pattern such as are used on the great lakes, and a large assortment of gill netting. Spanish cast netting, herring nets, trawls, and sundry other articles are suspended here and there with decorative effect, and there is a labyrinth of net-work, comprising the English style of cast nets, models of weirs used in New England, salmon traps, and salmon weirs, with fish traps of all description. The entire space is draped with cod hauling seines as used on the Newfoundland and Labrador coasts, and in the rear is an oil painting of a fisherman in the act of hauling in his net. There are also shown by this firm purse seines, and their method of oper-

ation, all styles of gill nets, traps, and nets used in the great lakes, models of floating traps, mackerel poaches, and in a word a complete collection of apparatus for the capture of nearly every kind of marine and fresh water fish.

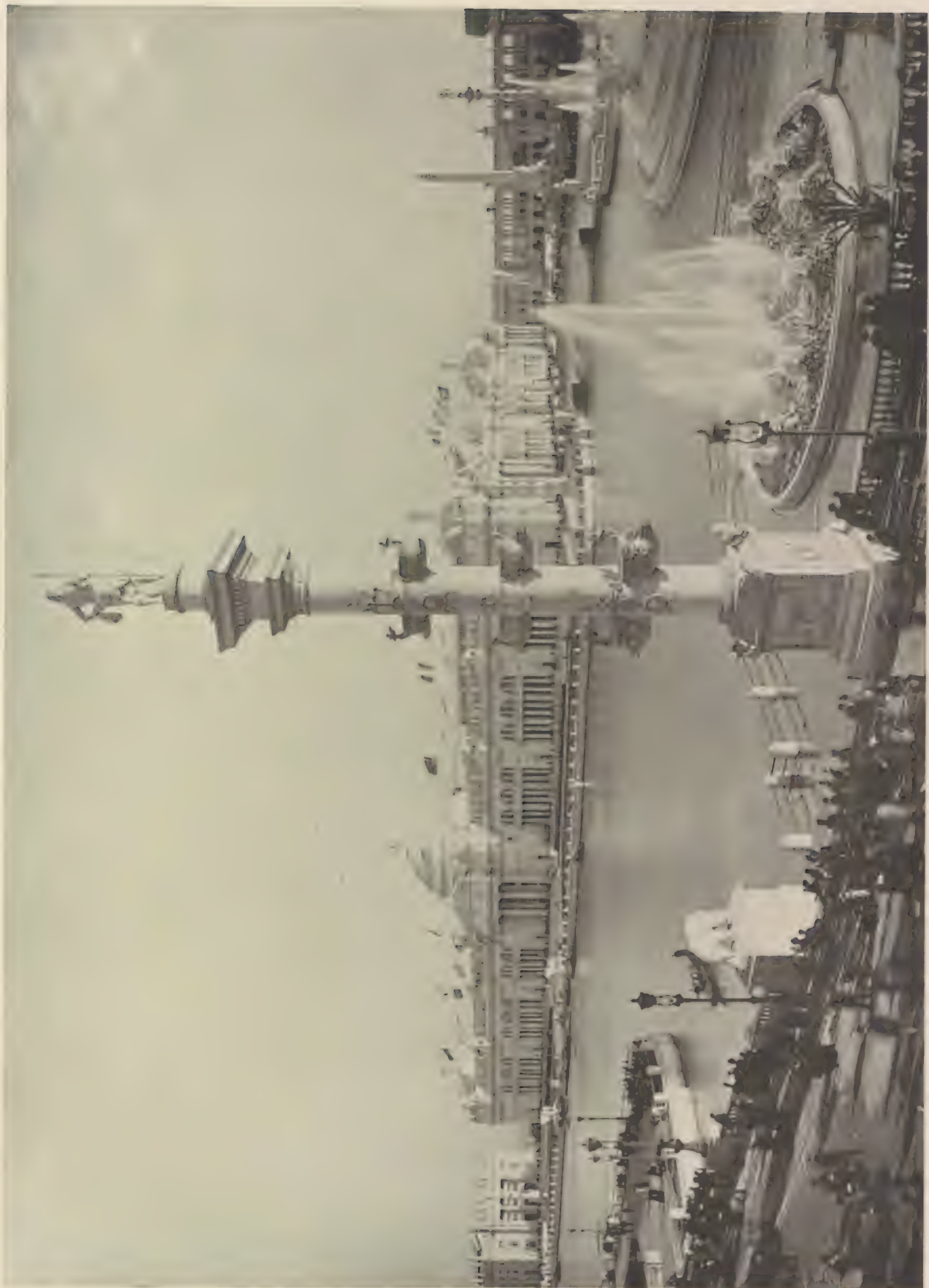
Adjoining the net and twine display, is an exhibit of oyster pails, patent oyster rakes, and similar articles. Another firm has an exhibit of scaling, washing, and weighing machines, and among other contrivances one for shaping, stamping, and weighing fish balls. Near by a Boston lobster firm shows an exact reproduction of a well-smack used for transporting lobsters to market. Through a flat glass casing, made to resemble the surface of the ocean, can be seen the bottom of the boat resting on what appears to be the bed of the sea. The vessel is supplied with windlass, wheel, blocks, and all other appliances for receiving, storing, and transshipping its cargo to the cars, which are lying alongside ready to receive their freight. On the opposite side of the aisle is a collection of sturgeon sounds, described as the "air, or swimming bladder of the sturgeon, skinned and dried, with neither taste nor smell, and therefore the purest article for jellies and other culinary purposes."

In this vicinity is the exhibit of the Boston firm of John R. Neal and company, in which are models of fishing vessels, and a large collection of traps, implements, seines and smaller nets, with a section of a mackerel seine side by side with illustrations of mackerel catching. There is also a large array of pictures illustrating the deep-sea fisheries of New England, with everything that pertains to the catching and curing of haddock, and the capture of cod and mackerel, including the position of the nets in the water, back of which are bunches of sea-weed and other marine specimens. Large maps show the principal lighthouses



GLOUCESTER FISHING BOATS





142211/12000 THE VIRGIN MARY FOUNTAIN, PARIS, FRANCE

from Cape Ann to Cape Cod, and from the latter point to Newfoundland the fishing-banks are distinctly located. Colored photographs reproduce the experiences of a fishing trip, and in graphic art are delineated the privations and hardships of the fisherman. Schooners are depicted amid the wintry seas of the north Atlantic, or lying in port with spars and rigging covered with ice, and with frost-stiffened sails that cannot be lowered.

So also are portrayed other phases of this great New England industry, in which are directly employed some 50,000 men and nearly half that number of boats and larger vessels, the value of the catch being not far short of \$20,000,000 a year. In Boston markets alone were landed in 1892 more than 35,000 tons of fresh

fish, haddock forming the greater part of the supply, and next, in the order named, cod, hake, pollock, and halibut. There were also 35 cargoes of frozen herring, while from points between Cape Cod and Nova Scotia were forwarded by steamer and railroad 5,000 tons of bream, flounder, smelt, mackerel, shad, blue-fish, salmon, and other varieties. In the first two months of 1893 the fishing craft of Boston harbor made 1,300 trips, with an average take of 15,000 pounds to the trip, this average falling far below the normal returns, for the winter was one of unusual severity.

In the southeastern part of the gallery the firm above mentioned has another collection of photographs, some of them representing famous craft among the fishing fleet, and in the centre of its enclosure, the front of which is draped with netting, is a fine specimen of photographic art, its theme representing the United States steamer *Atlantic* saluting the president. While only a private display, the exhibits of this firm present a vivid and faithful picture of New England and especially of Massachusetts fisheries in comprehensive and interesting form.

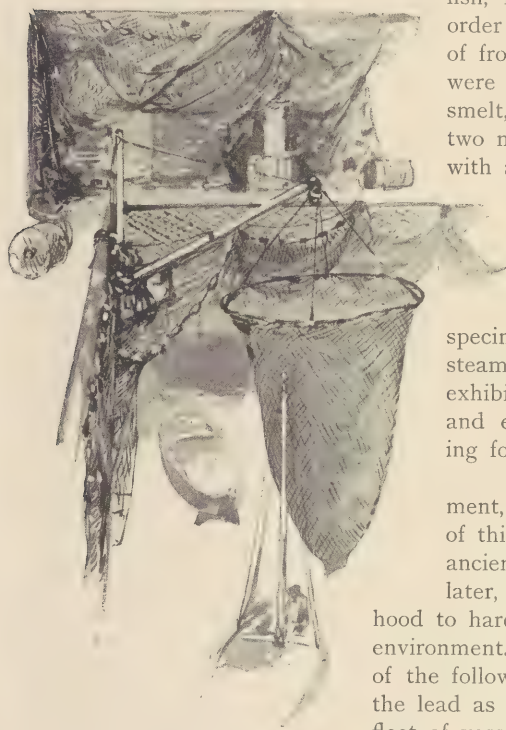
While as a state Massachusetts has no place in the Fisheries department, Gloucester, the harbor of Cape Ann and one of the largest centres of this industry in the United States, is worthily represented, as befits this ancient New England town. Founded in 1623, abandoned a year or two later, and permanently established in 1633, its colonists, inured from boy-

hood to hardship and privation, quickly overcame the disadvantages of their bleak environment. In the earlier portion of the following century it had taken the lead as a fishing port, building a fleet of vessels, among them the first schooner that ever sailed the seas,

the story of which is thus related in Babson's *History of Gloucester*. "Captain Andrew Johnson," he says, "had built in 1713 a vessel which he had masted and rigged in a peculiar manner, the same as the schooners of the present day. When launched, the peculiar skipping motion she made as she glided into the water from the stocks caused one of the bystanders to exclaim, 'O how she scoons!' Robinson instantly replied, as he dashed a bottle of rum against her bows, 'a scooner let her be.' Since that time the same class of vessels have been called schooners." In 1879, about which time the Cape Ann fisheries gave forth their maximum yield, there were about 900 vessels employed, with more than 5,000 men, the catch for that year amounting to 35,000 tons.

In the Gloucester section, adjoining the rotunda of the Fisheries building, is everything that pertains to the fisheries which she controls, from the colonial era to the year in which we live. A large portion of her space is occupied by a harbor scene, representing a fleet of fishing vessels built between 1775 and 1893, among them the *Chebabaco*, launched in 1775, the *Handliner*, in 1840, the *Pinkey*, in 1810, and two English craft whose history dates from 1623, while of those of modern build there are many famous specimens.

The section is arranged in the form of an octagon, each face of which, except the one in the water, is surrounded by an arch, and over the enclosure thus formed is a canopy of nets and seines. The object of the exhibit is to show the chief industries of Gloucester in pleasing and instructive form, and to illustrate her progress as a fishing port during nearly three centuries of growth. Here is represented in miniature the primitive wharf of colonial days, with the old-time flake or platform, fashioned of sticks and supported by stanchions, on which



SEINES AND NETS



PRODUCTS OF GLOUCESTER FISHERIES



the cod were dried. Near by is the modern wharf, where the men are at work spreading the fish and packing them for market. All the most recent methods for handling fish are shown in contrast with those of the past. At the head of the wharf, or near it, are spacious fish, smoke, and salt houses; and by way of contrast as to methods of cleaning vessels is an ancient craft, carefully scrubbed and painted, near to a handsome George's bank schooner mounted on a ship-railway, the scrubbing and painting performed by modern processes.

But the most striking feature is a mast-head 40 feet high, the top-mast rising from the side of the section next the dome, and on the cross-tree a fisherman scanning the waters for a shoal of mackerel. In front of the arch facing the central fountain is the inscription "Gloucester, Mass., U. S.," and on the capitals of the pillars which support it, the figures 1623 and 1893. On these pillars are statistics as to the cost, trips, catch, casualties, and other incidents relating to the fishing fleets, showing the amount of ice used, and fish and fish products distributed. In



HAND LINE, SINKERS, ETC

large photographs are depicted fishing scenes, the more pleasing phases in the lives of fishermen's families, and the buildings and environment of Gloucester.

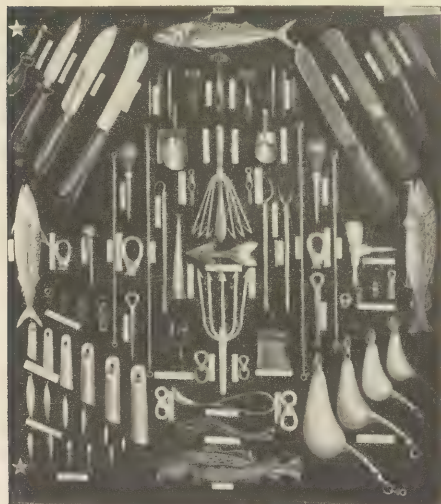
In the background of the exhibit are pyramids of boxes, barrels, and kits; canned fish in many forms, with fish in blocks, bricks, and tablets; smoked herring, mackerel, and pickled herring. There are also numerous devices for storing fish, with lines, nets, seines, trawls, buoys, and signals. Then comes a large assortment of fishermen's clothes, with tarpaulins, rowlocks, anchors of various sizes, patent windlasses, ice-crushers, fish-hooks, fish-knives, and, in a word, everything that pertains to fishing craft. An old American flag, with 27 stars, used on a fishing vessel three-score years ago, a large assortment of shells, sea-weeds, and curiosities gathered from



A GLOUCESTER PILOT

ocean's depths complete this interesting collection.

A Gloucester firm has an exhibit adjoining the one described, including a large assortment of the products of its establishment, as glue preparations in barrels, cans, boxes, and jars, with papers, tags, and envelopes, so arranged as to demonstrate the adhesive qualities of fish glue. Elsewhere in its section leather is glued together, and pieces of wood are fastened to iron. There is also a display of fish mucilage, of guano made from salt fish, and of bone waste and ground fish-bones for fertilizing purposes.



CABINET OF FISHING GEAR

Fronting on the central nave in the southeastern section of the building is another exhibit by a Gloucester firm, consisting of fish glues and articles made therefrom. In the centre of its court is a pyramid of liquid glue in jars, bottles, and cases. In show-cases containing hats and shoes are indicated some of the uses to which this material can be put, and in one of the corners a large bell weighing over a ton is suspended in mid-air as a test of its tenacity. There are also wagon axles with the steel and iron joined by glue instead of by nails or bolts, and a large cannon is so suspended as to illustrate its adhesive qualities when applied to wood and leather. In a collection of fish skins are shown the special grades from which the glue is extracted.

In the northern gallery is an interesting collection from the whaling port of New Bedford, which, through its board of trade, sent to the World's Fair many curious specimens connected with that pursuit, from the apparatus used for capture to the process of oil refining. Here are shown among other articles, the old toggle iron,



Pierce bom-gun, lance-gun, English gun harpoon, blubber gaff, hooks, ladles, and knives, with samples of whale oil and soap. On the walls are displayed in graphic art the perils of a whaler's life, and the whaling vessels and wharves of New Bedford, the former of old-time and modern architecture, including the *Progress*, now lying off the convent of La Rabida. There are also models of whaling vessels and the signals used at sea, groups

of sperm-whale jaws, a large walrus head, an assortment of whale-bone, and specimens of Arctic animals. To demonstrate the process of rendering oil, there are placed in the centre of one of the sections a large blubber tank, oil coolers, and a try kettle, as used on the deck of a whaler. Over the front of this court hangs an immense blubber hook, grasping a pair of whale jaws, and hanging from the gallery, suspended over the main floor, is a whaling boat completely equipped.

Maine has a small exhibit adjacent to the rotunda, the principal purpose of which is to represent her marine and fresh water species. On the walls are mackerel, chub, haddock, striped-bass, sand-shark, codfish, herring,

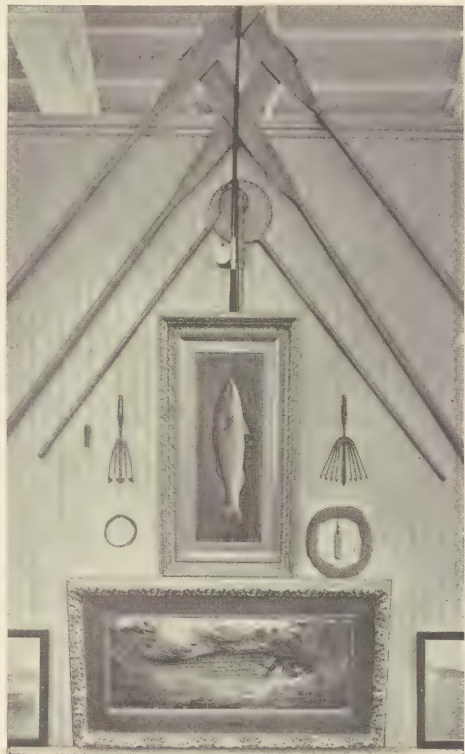


NEW ENGLAND TUNNEL POLE AND TRAP

lobster, and other varieties, including such rare specimens as the tautog and lump-sucker. In the centre of the group is a handsome painting of a salmon, and a collection of shells from the sea coast graces the front portion of the enclosure, while to the right is an aerating pump, the invention of one of the state commissioners. Adjoining this section is a display of canned goods by a Portland firm, consisting of clams, lobsters, and other shell-fish in tins and bottles grouped in pyramidal form.

The state collection of Rhode Island occupies a liberal space in the Fisheries building, appearing to excellent advantage in the southern half of the central nave. Of the oysters taken from New England beds, valued at about \$1,500,000 a year, a large proportion comes from that state, and another source of wealth is her manhaden fisheries, a species of the herring genus. Both industries are fully illustrated, everything that relates to the quest, capture, and preparation of fish for market being here displayed in models and graphic art. Among the former is one of the fishing steamer *George W. Humphrey*, showing remarkable fidelity of detail, and nicety of workmanship. Every particle of the vessel's equipment is reproduced, even to the rope which lowers the net, while down in the hold, carefully rolled away in tiny boats, are the finely knitted seines. From the mast is displayed the name of the steamer on a miniature flag, and near by is a model of the *Seven Brothers* on a less elaborate scale. Other models are those of a strike-boat and a cat-boat rigged and equipped for service in the scallop trade. In photographic form are represented many phases of the Rhode Island fisheries. In some of them are men setting, pursing, and gathering in the seines; in others are steamers towing heavy working boats, and there are sunset scenes on the water, with lighthouses in the distance, from paintings by eminent artists. Here also are shown the dwellings of the more prosperous fishermen of Tiverton, and in large, handsome paintings are grouped the choicest specimens from stream and ocean. Fronting on the nave is a famous boat, the story of which is told in the following inscription: "Presented to Ida Lewis, the heroine of Newport, Rhode Island, for her daring and successful efforts in saving human life in Newport harbor."

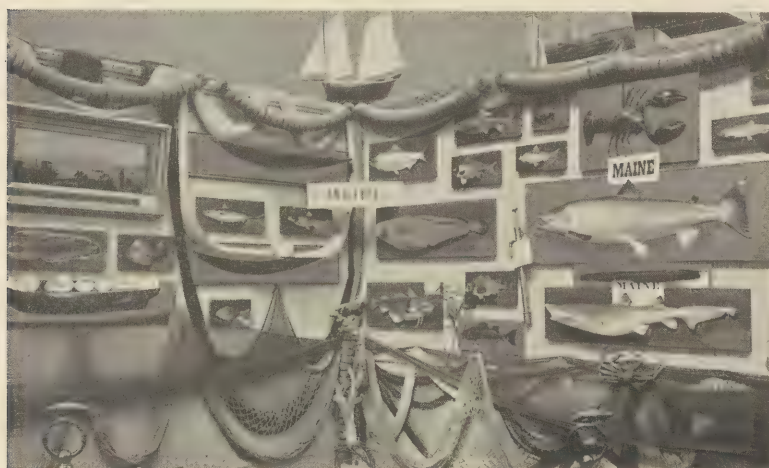
In a large case is shown an improved scup-trap and a model of a purse-seine, for capturing minnows, the former a remarkable contrivance. It consists in part of a long leader, with poles and netting, the fish coming alongside and around the leader, and finally landing in an enclosure called the kitchen. Should



PORTION OF RHODE ISLAND'S EXHIBIT



they swim ahead, the netting of another compartment is encountered, to which there is access through a square hole in the centre of the wall of netting which bulges in toward the kitchen. A large portion of the fish enter through this hole, thus reaching what is termed the parlor, and are thence transferred to the boat. To



CORNER OF MAINE SECTION

interpret the meaning of this device, small models of fish in metal are arranged in shoals, some having the appearance of swimming outside the leader, and others following them into the meshes of the trap. Near by is a miniature semblance of an old-fashioned trap, such as was in use half a century ago. Of hooks, rods, reels, nets, and tackle there is a large and varied exhibit, with a complete collection of oyster dredges, old and new, baskets, pots, rakes, measures, shovels, and other apparatus, showing how these fish are caught and handled. Tools for handling clams, spears for capturing lobsters, eel lanterns, sorting-boards, and luring nets are also among the minor features of the display.

The state of New York is not represented in the Fisheries building, but the space assigned to her, east of Maine's collection is occupied by several of her metropolitan firms. The most elaborate display is that of Max Ams, in which are demonstrated the most improved methods of preparing and packing fish for market. In the centre of the court is a row-boat filled with mounted sturgeon from the Delaware river, to the right of which is a large assortment of caviare, Russian sardines, anchovies, and other fish, in cans and barrels. One side of the enclosure is banked with a variety of canned goods; another group consists of pickled lobsters, herrings, shrimps, American caviare, sturgeon oil, isinglass, and sturgeon fertilizers. In rear of this section is a pyramid of potted and bottled fish goods ready for exportation, and on one of the partition walls are depicted the fishing grounds of Bayside, New Jersey.

Adjoining this section are the exhibits of other New York firms, whose individual collections include sardines and Columbia river salmon in cans, and glues from the skins of cod and cusk, with apparatus for testing glues and a device for determining the adhesive quality of fish cement, the latter a recent invention. Other firms have a joint display of caviare, Russian sardine jam, Berliner roll herring, spiced sea-trout, and a large variety of other salt-water fish in cans, kegs, and jars ready for market. There is also a special exhibit of barrelled, boxed, and canned mackerel, and around the enclosure are views of sardine canning factories, showing process of cleaning, salting, packing, and the manufacture of cans and other articles.

To North Carolina a large and prominent section was awarded in the northern division of the Fisheries building; and here is a display well worthy of a state which in this as in other industries ranks among the foremost of the southern sisterhood. In her river and sea fisheries several thousand men are employed, and several hundred vessels, the yield of the former averaging from 12,000 to 15,000 tons a year, and of the latter, including oysters, more than half as much. Since the depletion of the Chesapeake oyster grounds, the North Carolina beds have gone far to supply the deficiency; the public interests are here carefully guarded, a commissioner, appointed for the purpose, frequently visiting the beds and capturing or driving away intruders, while armed patrolmen are constantly on the alert. In flavor, size, and shape, the oysters differ widely, a favorite species coming from the New river grounds, though others are largely in demand, and as is claimed are not inferior in quality.

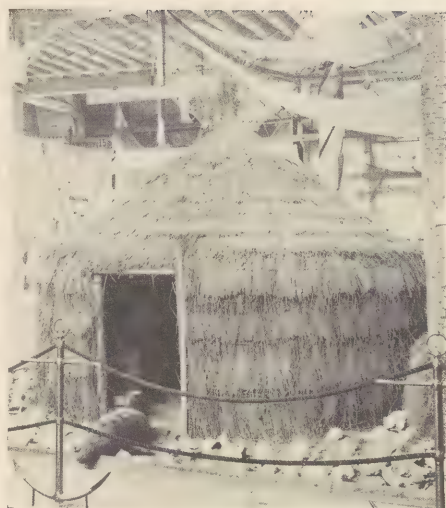


FROM FOREIGN SHORES



RHODE ISLAND APPARATUS





RUSH CAMP OF NORTH CAROLINA

fertilizing properties, while views of the guano factories show the process of its manufacture.

Among samples of food fish are the Spanish mackerel, pompano, black-bass, and mullet, with caviare prepared from the roe of the sturgeon for foreign export, and the fish of which isinglass is made. At the northern entrance are the jaws of the shark, and near the main portal is the head of a large spear-fish from the state museum, near which are harpoons for the capture of whales. Elsewhere are clam rakes and tongs, boat anchors and hooks, sound pulleys, and nets of many descriptions, with an Albemarle seine



FYKE NET. NORTH CAROLINA SECTION



ILLINOIS SAIL BOATS

From grounds that cover many millions of acres, North Carolina sends numerous specimens of oysters and oyster shells, the latter freely distributed along the flooring of her court. From North river and Harper's ferry are collections of planted oysters, and from Beaufort one of little-neck clams. Here also is shown the diamond-backed terrapin, a delicacy much in demand, and of such value as to be artificially cultivated and protected by legislation. In the centre is a rush camp, such as serve for the homes of fishermen, shaded by palmettos as samples of forest growth. In photographs is reproduced a wide range of southern scenery, and there are many illustrations of the various phases of a fisherman's career.

One of the choicest collections of mounted fish and aquatic fowl in the Fisheries building is contained in cases at the eastern end of the court. This includes numerous specimens of the canvas back duck from the famous duck regions of Carrituck sound, with the heron, bittern, Canadian goose, and a cluster of grouse. The animal list is larger, comprising squirrels, minks, musk-rats, skunks, beavers, and large bull-frogs. In one of the cases are migratory fish, and in another fish of great economic value, as the herring, roe, and shad, with the gar, red-drum, manhaden, and other specimens prized for their

2,500 yards in length, here reproduced in miniature. On charts are outlined the principal fishing and oyster grounds, with statistics as to the various branches of North Carolinian fisheries.

Among the special exhibits in the Fisheries department may be mentioned a Louisiana alligator, twelve feet long, and the largest of two sent alive to the Fair as a contribution from that state. The change of temperature proved fatal to both, and the one on view was stuffed and mounted for exhibition on account of its enormous size.

Illinois is mainly represented by a Chicago packing firm, whose space, adjoining the northern portal, is indicated by a series of pillars, supported by oars, above which is a drapery of flags and net-work. Life-buoys extend along the entire front, and over the entrance is the head of a deer, decorated with bunting. Within is a large pyramid of canned oysters, with pillars of canned goods at the corners rising to the ceiling, and a base of oyster shells. Elsewhere are shrimps, salmon, and oysters in cans, shells from the Azores, finger-sponges, star-fish, sea corn, and egg cases of the sea-whelk or winkle. To illustrate the effect on wood of the toredos, or boring worm, an old tackle block is shown perforated with holes.

In this collection is a lobster weighing more than twenty-three pounds, the largest thus far recorded. A model of a dory shows the type of vessel used for lobster capture along the New England coast, other models representing a crate for holding lobsters while boiling, a modern lobster trap, and a floating car for keeping the fish alive while on their way to market. The different modes of shipping bulk oysters are demonstrated in a collection of cans, barrels, and pails of recent pattern, and there are photographs and paintings of scenes among the canneries, with fishing boats and a



HOSPITAL OF THE SACRED HEART, MONTREAL



large wharf at Astoria, Oregon. By way of decoration are the heads of buffalo, elk, and reindeer on the further side of the court; in one of the corners is a small white baby seal. In the northern aisle of the gallery is another group of canned goods, including anchovies, lobsters, herring, and salmon.



PART OF OREGON'S EXHIBIT

fishermen in early days, and phases of Indian life and habits. The state hatchery of the United States fish commission at Duluth, are given due prominence, as also are the commissioners. In the piscicultural department are drawings illustrating the various stages in the development of pike and perch. Above the collection of birds and fish is a large canoe, in which are seated two life-sized Indians, one guiding the boat and the other in the act of spearing a fish.

Fronting on the central transverse nave is California's small but choice display, consisting mainly of colored casts of her various food fishes. Among them are specimens of the king-salmon, orange rock-fish, white sea-bass, Sacramento pike, starry flounder, grass rock-fish, the scombridea, with such rare and peculiar species as the cabrilla, speckled

scorpine, Spanish flag, and others; and as representing the entire coast, the jew-fish, pesca, vermiglia, striped bass, and a large mounted sturgeon. The

members of these groups differ widely in size, shape, and color, giving to the entire collection a unique and novel appearance.

At the eastern end of the main building is the exhibit of the high school of San Diego county, California, in whose show-cases is a carefully selected assortment of star-fish, corals, sea-moss, pearl and other shells, with many beautiful articles made therefrom. Near these are groups of crabs, horned toads, abalones, shark's jaws, shark's eggs, and the ear-drum of a whale. In another division, extending the entire length of the space, is a great variety of fish-eating birds, as the curlew, butter-ball, American white pelican, and road runner. There is also a large collection of San Diego fish, both mounted and dried, including the salmon, white-fish, rock-cod, croaker, black-perch, and blue-fish. The leopard shark and devil fish are here on exposition, and there are many fancy articles skilfully fashioned of scales, shells, and seaweed, with other rare articles scattered so liberally throughout the exhibit as almost to give to it the appearance of ocean's bed. A large picture of San Diego and the surrounding country, showing Coronado beach, National city, the table lands of Mexico, and the snow-capped mountains of Cuyamaca,



FROM SAN DIEGO, CALIFORNIA



JAWS OF WHALE, SECTION ENTRANCE





A FEAST OF SALMON, WASHINGTON EXHIBIT

suspended the skeleton of a whale, its jaws forming an archway at the entrance of the court. The exhibit consists largely of canned goods, including salmon, sturgeon, crabs, and lobsters. Of fish destroying birds, the eagle, whistling swan, and North American bittern are the largest and most voracious specimens. In well preserved specimens are also the wolf-fish, salmon, dolly-varden fish, trout, squid, and other river and ocean species. Oysters, native and acclimatized, mussels, clams, of the short-neck, razor-back, and mammoth varieties are well represented. There are likewise shrimps, cockles, and a large collection of mounted fish, as white sturgeon, star-fish, chinook, blue-perch, flounder, rock-cod, white-perch, sculpin, and salmon in every form.

In the centre of the court are models of fishing-boats, including one with its outfit occupied by the Makah and other Indians who captured the Exposition whale, together with the relics and fishing implements of various Indian tribes. A mixed collection includes shells, barnacles, sea-weeds, and other ocean products, with harpoons and various implements made of bones and skins, while poised erect at the rear of the enclosure, with a fish in its mouth, is a large sea-lion from the Columbia river, whose scenery and fishing industries are reproduced in photographic form.

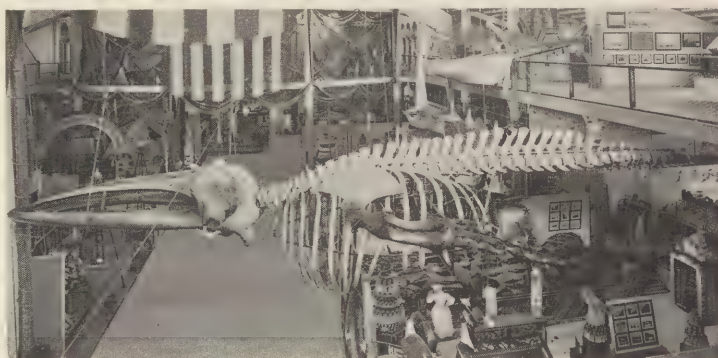
Salmon taken from the Columbia river form the mainstay of the Oregon and Washington fisheries, and were introduced into foreign markets long before canneries were established by American citizens. From about 21,000 cases in 1869, the pack increased to 629,000 cases in 1883, when the maximum yield was reached, the catch thenceforth diminishing with the rapid depletion of the fisheries. Meanwhile the export trade, beginning with 30,000 cases in 1871, rose to 479,000 cases in 1876, realizing more than \$2,500,000. Of Alaska, though not represented at the Fair, it may here be stated that her canneries bid fair to rival those of the Columbia, their output showing a steady gain, and gradually finding favor among eastern and European communities.

Among foreign exhibitors Norway occupies a large and prominent section on the northwestern floor of the

serves as a background covering the surface of the partition wall.

Oregon's display consists mainly of canned salmon, in the form of pyramids, the joint exhibit of the leading packing houses of Astoria. A model of a salmon boat, fully equipped, and a patent scoop, or salmon wheel, show the method of capturing salmon on the Columbia river. Finely preserved specimens of salmon are here, as also are clams, red trout, porgies, and blue-back bass. A case of pheasants and a picture of Mount Hood in the background form pleasing additions to the display. There is also a picture showing an Astoria fishing fleet returning from the grounds with a heavy catch, near to which is a fur-seal, weighing over 1,200 pounds. To Oregon was assigned an additional section in the east gallery, where was placed an assortment of canned salmon and fish packed in various forms.

Above Washington's enclosure, adjacent to Oregon, was



SKELETON OF A WHALE



Fisheries building, where is well represented an industry in which one-fifth of the population is directly employed or interested, one that forms a large portion of the food supply, and with a considerable surplus for export. Here sea-fishing is conducted almost entirely off the coast, and in open boats, owned for the most part by the fishermen themselves. At the Lofoden grounds, in the far northwest, the largest of Norwegian fisheries, 30,000 men assemble, with 7,000 or 8,000 boats, and of their cabins, built among a group of islands within the Arctic circle, a specimen in Norway's court serves as the office of this department. Though here, as elsewhere, storms prevail for about one-half of the season, the catch in fine weather is phenomenal, the take of cod being estimated at 56,000,000 a year. Herring and mackerel, of which there are several species, are next in economic value, and among others the salmon, whale, and seal fisheries swell the total exportation of fish and fish products to \$12,000,000 a year.

In front of the Norwegian court is a series of pillars, adorned with flags, and between them a drapery of netting, with net-buoys and other objects of interest. At the entrance is an arch formed of boat-oars tastefully decorated, with the word "Norway" conspicuously displayed, and above it the crown of Norway resting upon the royal coat of arms.



WITHIN THE FISHERIES BUILDING



FISH OF THE FAR NORTHWEST

centuries before the Columbian era. All are of full size, completely equipped, and show every known device for catching fish. Among the models of modern craft are whaling, cod, and herring boats, manned and with every kind of apparatus used in localities ranging from the whale and seal fisheries of the north to the mackerel grounds of the southern peninsula. There is also a model of a whaling steamer, on the upper deck of which is a miniature cannon, with bomb-harpoon and a complete equipment for catching the bottle-nose whale. Here also is a model of an improved foghorn, differing from all others in that the air is pumped into one side of a square box, from which on becoming surcharged it escapes through a horn on the other side, with a sound that can be heard for a distance of several miles.



ORIENTAL FISHING BOAT

Along the wall of this section are plaster casts of Norwegian fishes, including the hake, ling, flounder, lemon-sole, herring, shad, plaice, turbot, whiting, mackerel, polar red-fish, lump-sucker, eel, gray gurnard, and many other varieties. In boxes, cans, and kegs is an assortment of fish in marketable forms, and on the centre of the wall is a large oil painting, the theme of which is a gale off the northwest coast of Norway.

In another section, separated by a long row of pillars reaching from ground floor to gallery ceiling, is a valuable collection of specimen products of Norway fisheries, displaying in separate jars, first the fish, then the oil, scrap, and bones the two last also in the form of fertilizers,



Meal made of fish is among the collection, and around the pillars are piles of bloaters, mackerel, herring, anchovies, cod, and so forth. In tiers, one above another, rising to the roof, are samples of dried and pickled fish, and dried back-bones of cod; and in other groups are barrelled and canned fish, and the salted roe of the cod and mackerel. In addition to the products of the whale and seal, are isinglass, oils for medicinal purposes, boiled cod, preserved fish, meat, and game, and potted omelets and roes. A fine display of cod liver oil comes from Lofoden and other fishing centres. The Modums fishing association displays its piscicultural apparatus, and a large collection of skin and oil clothing shows how fishermen dress in various localities along the coast. An instructive exhibit is from the Exposition committee at Bergen, with various well developed



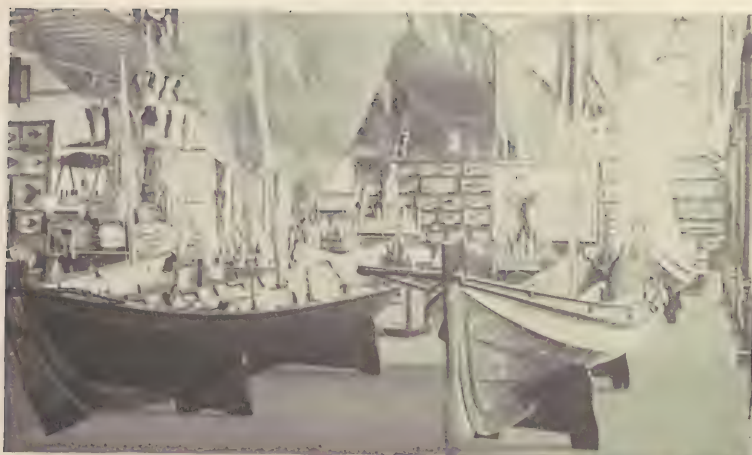
VIEW IN NORWEGIAN SECTION

specimens contained in bottles, by the side of which are the results of a careful analysis, showing among other items the percentage of potash, water, and lime contained therein. The same association shows the salted skin of a Greenland whale, a tanned wolf's skin, seal skins dressed with alum, and a reindeer's skin with head and horns attached.

North of the aisle which divides the court the remainder of the exhibits are arranged in convenient groups along the walls, the canned goods including stock-fish, split fish, preserved shredded fish, and preparations of jellies and sauces, with monster cases from every noted fish mart in Norway. In other sub-divisions, enclosed by screens and railings, are the exhibits of the Bergen committee, which has still another collection of fish products, in more than fifty varieties, with improved fishing implements, anglers' outfits, nets for catching every kind of fish on the coast, buoys and beacons, gaffs, sinkers, seines, weirs, lobster and eel traps. There is also a patent winch, a contrivance for hauling in cod and herring nets, and one that can be used for hoisting sails and masts. In another case is a large variety of lines, and near by a whale harpoon, with cannon and shells. A third group consists of artificial bait; and there is an interesting collection of hooks, dating from the year 1797.

The exhibit of aquatic birds by the Bergen committee includes the eider duck, of which there are many specimens, the yellow-legged gull, the diver, cormorant, guillemot, and ouzel, while the effect is greatly enhanced by beautiful quilts made of eider down. A large polar bear, in the act of catching a seal, forms the central figure of the section. Photographs and sketches, giving a panoramic view of the coast, show the various fisheries and harbors, and Norwegian game fish are freely illustrated. On statistical charts are represented in colored circles the amount and value of the catch at each station from 1866 to 1890, with other data relating





SAIL BOATS

Models of fish curing and canning establishments, show the processes of drying, salting, smoking, trimming, and cooking, while appliances for preserving fish during transportation are also reproduced in models. By the fishery association of Modums is exhibited a model of a fish-hatching apparatus, with vessels for catching the roe and fry in different stages of development, and breeding and rearing establishments for oysters and other shell-fish.

Around the walls are pen and ink drawings of fishing scenes in northern waters, and a large painting of Arctic scenery, with icebergs, and a party of hunters on ice-floes in the act of spearing seals.



MODELS OF BOATS



NORWEGIAN FISHING CRAFT



In the gallery, the first two sections on the north side are occupied by an exhibit of Norwegian seines, nets, lines, and a large assortment of dried fish. The sections along the west end contain numerous implements for fishing, and appliances for handling and transporting fish to market, with floats, buoys, sinkers, and other apparatus. The entire enclosure is draped with netting, copiously decorated with flags and emblems, and across the entrance is the national coat of arms.

Great Britain has a small but choice display adjoining the western entrance of the Fisheries building. To the right of the enclosure is a Scotch exhibit of salmon flies in a handsome gilt case, and another Scotchman illustrates in diagram form the method of electric communication with fishing fleets at sea. The latter shows first the electric signal



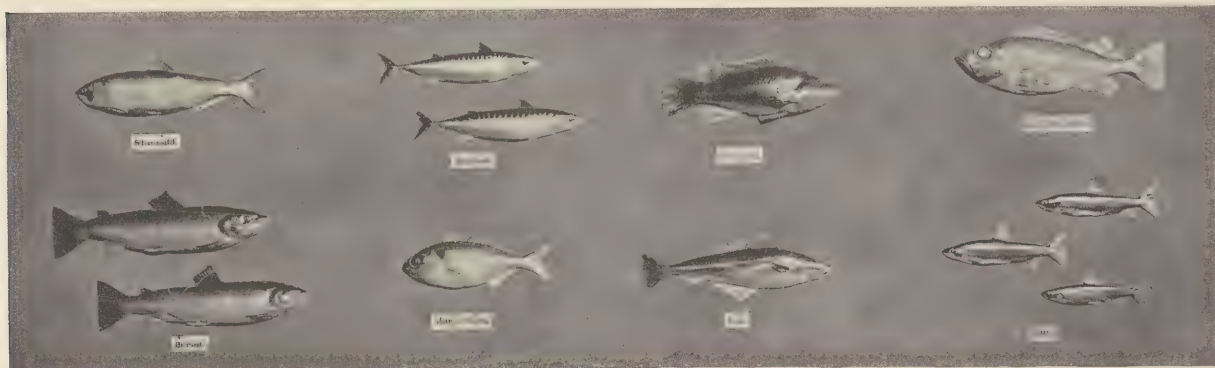
ANCHOVIES FROM NORWAY

cabin ashore, and then the submarine cable, extending from shore to within a convenient distance of the fishing grounds, where it is moored to a terminal buoy. There are also beacon buoys, carrying metal flags to indicate the course, and at both ends are electric bells. A novel feature is that the cable can be picked up by means of a grappling hook, and messages sent ashore from any point. Near by are plans and diagrams of ice houses, models of railway cars for conveying fish to market, and of the boxes in which they are packed. Another series of diagrams show a fisherman's portable bothy, adapted to the herring grounds on the coast of Scotland. The structure is built of undressed wood, and rests on a mound of rock; its roof is of corrugated iron, and its floor of earth, ventilation being from above. Other designs by the same exhibitor are in the form of permanent dwellings for fishermen.

From a prominent fish-curing establishment of Scotland is an exhibit of finnan haddies, sun-dried cod, saith and ling, cured fish and barrelled herrings, the last also displayed by a Glasgow firm. A London house has a large collection of India rubber goods, as waders, fishing trousers, boots, overalls, and various articles pertaining to the outfit of sporting fishermen. London has also an elaborate assortment of hooks, from those which catch the whale to such as are used for the capture of minnows; together with an assortment of flies, needles, prongs, and lines. Decoys, as worms, toads, reptiles, and butterflies are arranged in various forms, and a



COD LIVER OIL



DENIZENS OF NORWAY'S FISHING GROUNDS

number of gold medals shows the exhibitor's standing at previous expositions. Still another English firm has a collection of hooks for both sea and river use, and adapted to the fisheries of every land.

Occupying nearly one-third of the British space is a model of the Baltimore fishery school, in the county of Cork, Ireland, the special contribution of Baroness Burdett-Coutts, who was one of the founders of the



school, and formally opened it in 1887. Here is shown how the pupils are taught all the arts relating to fishing and fish curing, with their dormitories, class-rooms, and net-making and mounting rooms. The special object is to explain what is being done to revive the fishing industry in a district where it had become almost extinct. The model is twenty feet square, and stands for Ireland's part in the fisheries exhibit of Great Britain.

While not wanting in attractive features, the British display affords no adequate representation of an industry in which England far outstrips all other countries in the world. From the fishing ports of the United Kingdom more than 400,000 tons of fish a year are conveyed inland by rail, and including shell-fish the value of the annual catch is not far short of \$40,000,000. Yet even this enormous yield does not suffice for home consumption, imports of fish amounting to nearly \$15,000,000 a year, against \$8,000,000 or \$10,000,000 of exports. The number of men employed is almost as large as the standing army of Great Britain, probably exceeding 125,000, with 30,000 registered boats, the Scotch contributing the larger proportion; for the fisheries of Scotland produce almost as abundantly as those of England, though with a smaller relative value.

No less remarkable is the yield of Canadian fisheries, estimated for 1892 at \$20,000,000, or one-half of the British production, though the population of the kingdom is more than seven-fold that of the dominion. Cod ranks first in commercial value, with a take for that season worth \$4,000,000, and next are salmon, worth \$2,500,000; herring and lobsters, each \$2,000,000, and mackerel, \$1,500,000. In these and other fisheries are employed about 65,000 men, with more than 30,000 boats and 1,200 larger craft, while of nets and seines there are several million fathoms.

The fisheries of Canada are among the

richest and most extensive in the world, reaching, on the Atlantic coast, from the strait of Belle Isle to the bay of Fundy, and together with British Columbian shores affording 12,000 miles of ocean seaboard. Add to this the inland waters of the great lakes, of Manitoba and the Northwest territories, with rivers and streams abounding in fish in many portions of the dominion, and we have a source of wealth, as yet but partially developed, second only to her agricultural resources. Herring, mackerel, and smelt are captured in immense quantities along the seaboard of the maritime provinces; British Columbia yields, in addition to other varieties, 2,500,000 a year of salmon, and the inland waters of the dominion team with white-fish, trout, sturgeon, bass, and pickerel, the take of the first alone exceeding 23,000,000 pounds. Oysters are found in abundance in Nova Scotia, New Brunswick, and Prince Edward island, and the lobster canning industry, beginning in 1869 with a production worth \$15,000, had increased by 1881 to its maximum value of \$3,000,000, with more than 600 canneries still in operation. Protected by laws that are rigidly enforced with the aid of armed cruisers and a large force of officials, the Canadian fisheries are in no danger of depletion, while in the several provinces thirteen hatcheries increase the natural reproduction, 140,000,000 fry, mainly of salmon, salmon-trout, white-fish, and lobsters being planted in the single year of 1892.

A large trophy in the southwestern section of the Fisheries building marks the starting point of Canada's exhibit, where around a lofty octagonal pagoda are arranged in tiers the various products of ocean, river, and lake. Seines of all sizes and of finished workmanship are abundantly displayed, and above all is the figure of a tall Canadian fisherman. The groups are classed in five divisions, one for each of the provinces, occupying a total space of 7,000 square feet, and forming as a collective exhibit one of the strongest features in the department.

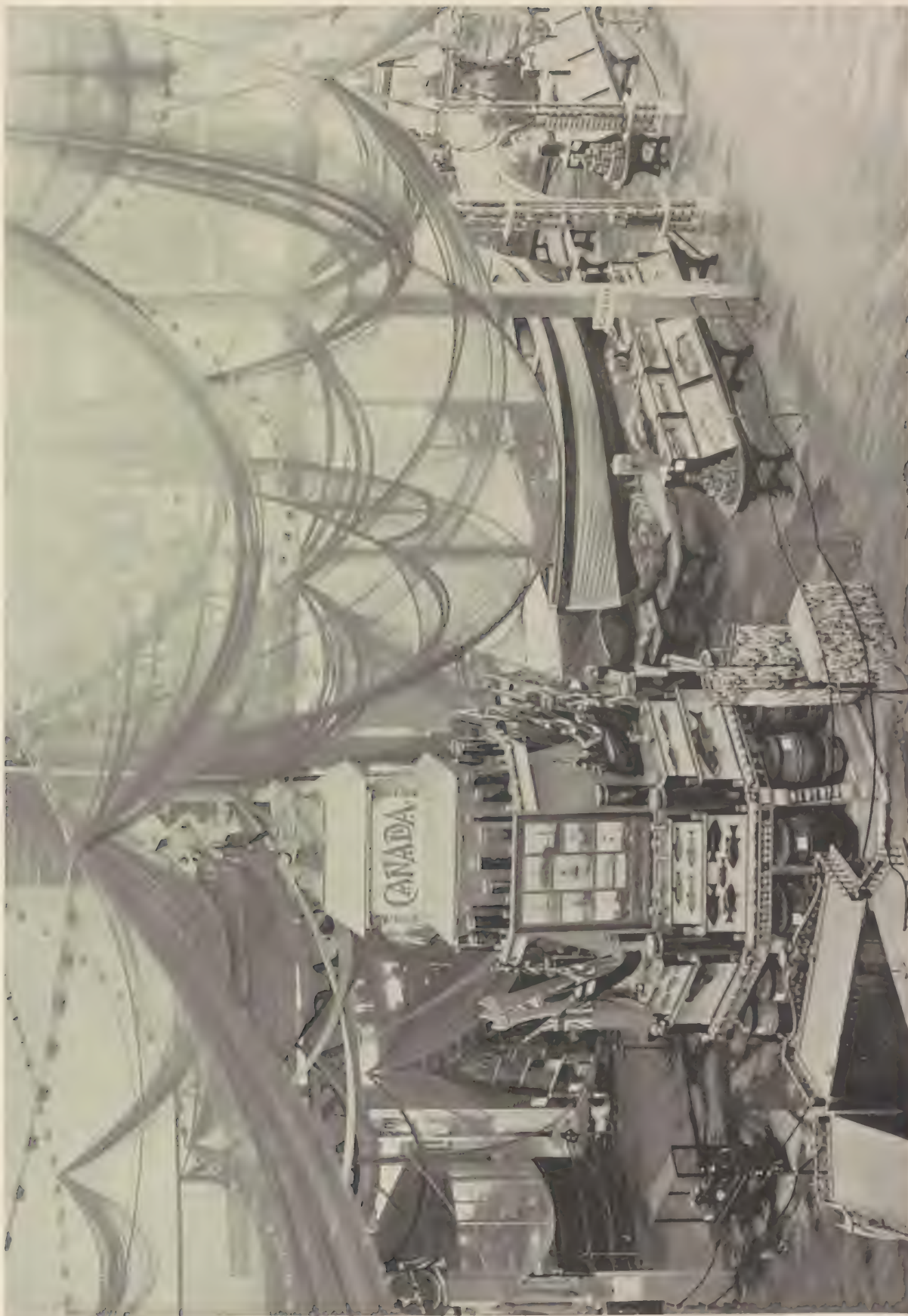


CANNED GOODS FROM SCANDINAVIA



PRODUCTS OF NORTHERN FISHERIES





PORTION OF THE GREAT CANADIAN SECTION





BOAT PRESENTED TO IDA LEWIS



HOODED SEALS, GULF OF ST LAWRENCE

and fishing gear of all descriptions. In the front section is one of the birch bark canoes of the Micmac Indians, of New Brunswick, and near by are the canoe and dug-out of the British Columbian Indian, in contrast with which is a fishing boat from Nova Scotia, with models of other sail and steam boats. The Hockins fish-way and a lighthouse, with nine large reflectors, recently constructed near Montreal, are also shown in models. The former is unlike anything of the kind on exposition, and is best described in the words of the official in charge of Canada's exhibit. "It resembles," he says, "a hole in the bottom of a dam, with the velocity of the discharge so reduced that a fish may go against the current and swim into the pond above. It consists of a series of apartments having approximately a level floor, with side walls and transverse partitions every four feet of its length, from the bottom of the dam to above the water line. These apartments are connected with one another and with the pond above and the river below the dam. The water in the several apartments will be lower step by step from inflow to outlet, and flows out of the last aperture under the head of about two feet. Fish can easily make their way from the first apartment to those above, and it is so built up from the bottom of the pond that the ice cannot form under it." In photographs are illustrated fishing episodes along the Fraser river, Indian modes of fishing, and the scenic wonders of Vancouver island.

In an adjacent court are cans of Fraser river salmon, with photographs of New Brunswick scenery, and of fish hatcheries at Quebec and Halifax, a separate group showing the famous Ontario hatchery, with its museum and underground chamber. Fishing craft of many types are reproduced in models, as also are the vessels used for protective purposes, and a steamer forging its way through the ice of subarctic seas. There are specimens of the larger fish for which Canada is famous, among them a halibut weighing 300 pounds, a Greenland shark, and monsters of the deep from the gulf of St Lawrence, including the rare white whale, a ton or more in weight. In one of the cases are the sharp-nosed sturgeon, wolf-fish, and a pair of baby seals; and among the finest specimens of mounted fish are the quinat salmon from British Columbia and the Atlantic salmon from Nova Scotian waters, near which are otter, mink, and an Ontario beaver. In mounted samples the dominion is especially strong, including the yellow perch, salmon-trout, and many varieties of lake suckers from Ontario; sturgeon, salmon, and bass from Quebec; shad and sun-fish from New



REPTILES PRESERVED IN ALCOHOL, NEW SOUTH WALES



PART OF NEW SOUTH WALES DISPLAY

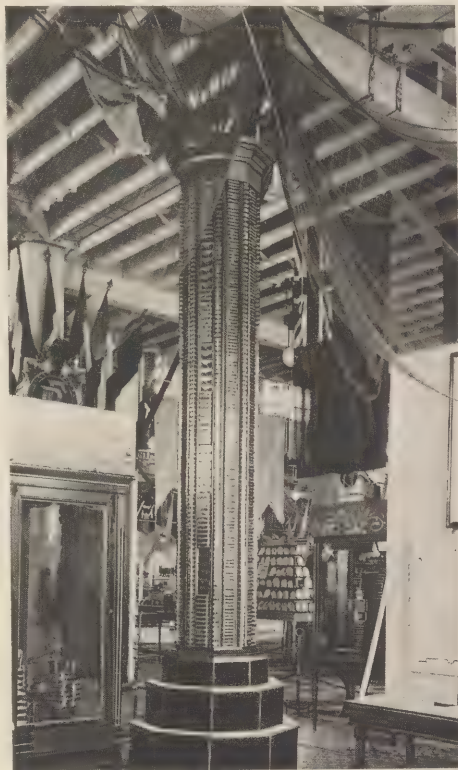


Brunswick; cod from Nova Scotia; buffalo-fish from Winnipeg, and ling, rock trout, green cod, and others from British Columbia. Inland waters are also represented, as by the cod of the St Lawrence, the sheepshead of the Detroit, the cat-fish of the Red river, and the salmon, trout, and white-fish of the great lakes.

In other cases is a choice collection of preserved specimens from every quarter of the dominion. Nets, lines, and traps are freely displayed; there are assortments of whalebone, of sturgeons' sounds, and of lobsters from British Columbia, whose sealing fleets are shown in photographs, and among curiosities are an old sealing musket and the tusk of a narwahl from the Hudson Bay region. An attractive feature is the collection of shells, contributed from all the provinces. From the marquis of Lorne comes an assortment of barnacles gathered from the neighborhood of Victoria, and a Montreal exhibitor has a display of river crustacea. Among the specimens preserved in alcohol are squid, starry rae, horse-mussels, sculpin, and lobsters more than two feet long; while of fish in commercial forms there are herring, cod, and salmon in cans and barrels.

Fishing craft and their models are also among the attractions of the Canadian courts. In the front section there are, in addition to those already mentioned, models of the government vessels which protect the cod banks of Newfoundland, and of such as are engaged in those fisheries. By a Nova Scotian firm is shown the counter-part of a Newfoundland fishing schooner displayed in London at the fisheries exhibition of 1883, and afterward purchased by the prince of Wales. Her sails are set, and on every side are groups of fish, with modern implements and gear of every kind, in contrast with which is the primitive fishing apparatus of Canadian Indians. Of seals there are several specimens facing the central nave, and of shell-fish there is no lack, with oysters, clams, crabs, and lobsters of remarkable size and quality. Here also is the largest devil-fish ever placed on exposition, and to fish products, as oils and skins, is given a conspicuous place.

The entrance to the principal court is in the form of an archway composed of canned fish with bottled goods inside the pillars, and at the top a panel formed of fish products. The interior is draped with netting, flags, and bunting, and on the columns are the dominion and provincial coats of arms. In the southern gallery Canada has also several sections, and here again in scores of cases



COLUMN OF FRENCH SARDINES



MODELS OF RUSSIAN BOATS

are numerous specimens of mounted fish stories, and fishing scenes are likewise portrayed in graphic art. But here the centre of attraction is a model of a fishing station, with coast line and piers, warehouses, stores, and dwellings, resembling a sea-port town in miniature. Finally it may be said that the entire exhibit is in all respects worthy of the dominion, one on a larger and more comprehensive scale than any before attempted, and yet, as is said, with an overflow of specimens offered for exposition that would have filled at least one-half of the Fisheries building.

Adjacent on the west to Canada's display is that of a country from which she is separated by half the circumference of the globe—the British colony of New South Wales. This is also a most interesting feature in the Fisheries department;

for while less elaborate than that of the dominion, the majority of visitors will here for the first time be informed as to the vast resources of Australian fisheries. Many of the specimens are taken from the waters of Sydney harbor and the grounds adjacent, where are some of the most prolific fisheries in the world. Among the principal food fish are the schnapper, bream, rock-cod, gar-fish, mullet, mackerel, and whiting. The first is a favorite pan fish, with firm, white flesh of excellent flavor, and weighing when full grown from six to nine pounds, though twenty-pound schnappers are by no means rare. It is found in vast shoals along the entire



eastern coast of the southern continent, and is one of the most voracious of fish, greedily seizing the bait, and taken by hook and line at all seasons of the year. The bream is second in flavor only to the schnapper, and by many the gar-fish and the red and black rock-cod are preferred to either. Of mullet there are several varieties, the sea mullet resembling the Scotch salmon in taste and fibre, and of

astonishing fecundity, the roe of the female containing more than 2,000,000 eggs. About Christmas week—the Australian midsummer—and for several weeks thereafter, the expanse of ocean is partly covered by migrating schools of mackerel. The whiting has no affinity to the European species, but is of superior quality, and when lightly cured and smoked is esteemed as a table delicacy. Then there are the coarse grained jew and king-fish, the salmon, unworthy of its name, and of which only the roe is eaten, the herring, of excellent flavor but little used for food, the perch and flat-head, the latter with white, flaky flesh, the



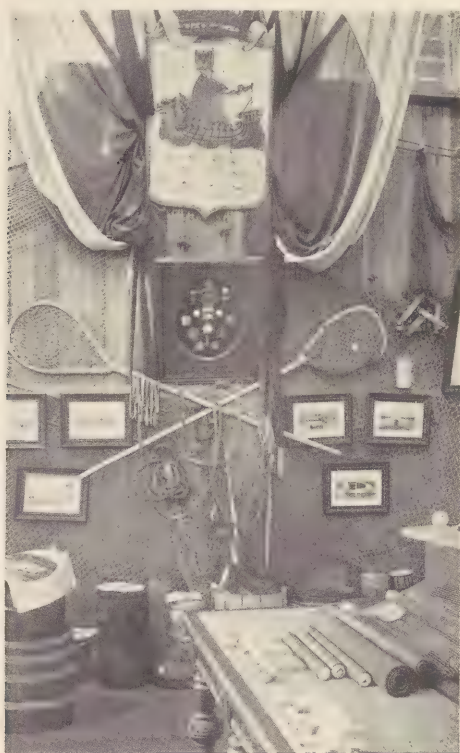
HERRING FISHING BY THE DUTCH

flounder and sole; while among crustacea the cray-fish is not inferior to the American lobster, and oysters and other mollusks abound in every bay and inlet.

With all this wealth of fisheries it is somewhat remarkable that New South Wales imports from abroad more than three fourths of her entire consumption, about \$200,000 representing the value of fresh fish sold in Sydney markets against \$650,000 worth of imported fish preserved in various forms. This is due mainly to high prices caused by the rapid depletion of the grounds within and adjacent to Port Jackson, for as a rule the colonial fisherman will not venture more than a mile or two from Sydney heads, and experienced sea-going fishermen supplied with modern implements are almost unknown in Australian waters. The appliances used are the same as did service half a century



TANNED FISH SKINS. RUSSIAN SECTION

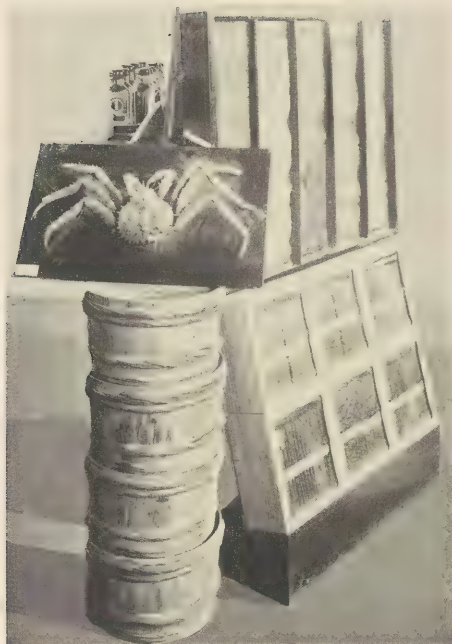


RUSSIAN FISHING NETS

ago, and the field is still restricted to grounds that have been worked for several score of years, a seine and meshing-net with a rickety open boat forming the entire outfit. There is not a fishing steamer or even a fishing smack in all the Australian colonies, and apart from the most primitive apparatus, there is no provision for deep-sea fishing of any kind. Here in truth is an outlet for foreign capital and enterprise, one capable of infinite development and offering sure and speedy returns; for while there is no country in the world with richer resources in this direction, there is none where these resources have been so much neglected and mismanaged.

To make known the latent wealth of Australian fisheries, their products, methods, and results, was the special object of the colonial government of New South Wales. To this end are shown several groups of canned goods, and of marine and fresh water fish preserved in alcohol, as schnapper, whiting, rock-cod, flounder, gar-fish, flat-head, and an assortment of dried fish and fish oils. There is also a large display of pearl and oyster shells, some of the latter





GIANT CRAB OF JAPAN

fish are preserved. The remainder of the space is largely devoted to the sardine fisheries, one of the exhibiting firms constructing pyramids of packed sardines; in the background a fishing scene is represented in graphic art. Nets, with a single model of a boat and a collection of gold medals, complete the private exhibits. From the government is an exposition of the national fisheries, with statistics, plans of hatcheries and grounds, and a chart showing the annual production of oysters.

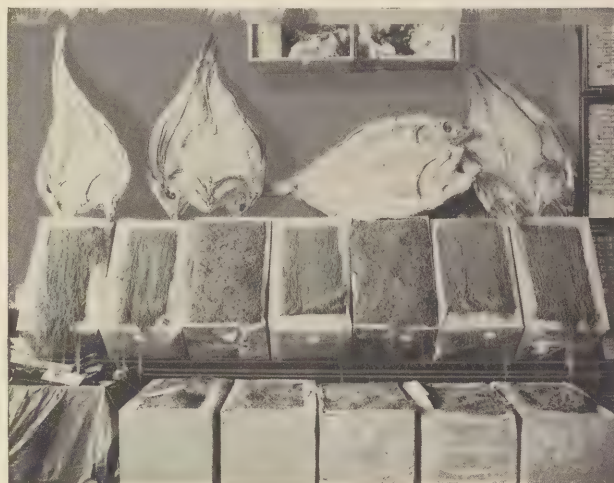
Germany has a small and compact exhibit in the southwestern corner of the building, consisting largely of models of fishing craft, fully equipped and rigged, and of schooners and steamers used for conveying fish to market. One of the groups consists of fish guanacs and chemicals, and another of fishermen's houses, fish markets, and their appurtenances. There are also pounds, traps, apparatus for transporting fish, and maps and diagrams showing the coast line of sea fisheries. A Munich firm has a large collection of hooks, lines, and spinners, and from Holstein come netting, baled rope, seines, corks, oars and prongs, buoys, and a model of the cutters used in the North sea. Another firm sends neatly bound volumes on the fishing industries of Germany, and there are large photographs of German scenery and of factories for the preparation of fish products.

In Russia, with her vast extent of coast and inland waters, the fisheries are of great economic value, far exceeding those of France and Germany, neither of which produce as largely as the dominion of Canada. In the White sea and on the northern coast of Norway several thousand tons, including more than 100,000,000 herring, are captured by Russian fishermen. In the sea of Azoff and on the lower Don about 20,000 men are employed, with other thousands among the estuaries of rivers discharging into the Black sea. But the principal fisheries are on the Caspian and its tributaries, those of the Volga and its delta extending over an area of 6,000 square miles, while from the Ural fish are taken for 400 miles along its stream, the total catch exceeding 200,000 tons, worth at least 15,000,000 roubles. Within recent years a large station has been established at the Seenemorskoi fisheries on one of the mouths of the Volga delta, a region before uninhabited, and now supporting a flourishing settlement, with steamers, barges, lighters, and hundreds of fishing boats; with warehouses, stores, and barracks; schools, libraries, and hospitals, and all the adjuncts of a substantial and prosperous community. An average season's take is valued at 2,500,000 roubles, the catch consisting mainly of herring and dace, but including nearly a score of varieties.

clinging to bars of iron as found in ocean's bed, and in another group are fish fertilizers and soaps. In cases on either side of the court are mounted specimens of fish-eating birds, as the fish-hawk, cormorant, shag, large-billed bittern, gray heron, and sea-gull. A careful collection has been made of the reptiles of the colonies, and of these there are many hundreds preserved in alcohol. Australian smoked fish occupy a large space in the rear of the section, near which are cabinets of shells, reptiles, and marine fish from the Sydney museum.

On the left of the court is a small yacht, made of Australian wood, equipped as a pleasure craft for amateur fishermen, and near the entrance is a model of a twenty-two foot fishing boat. The west wall is covered with a series of paintings of marine fish, and at either end are handsome photographs of the fish market at Woolloomoolloo, a suburb of Sydney. On the east wall are choice paintings of salt-water fish by a prominent Australian artist, and at the portal is a trophy in the form of a lighthouse, composed of canned goods. Seals disporting on rocks in the centre of the court form an attractive group, and colonial flags and banners are among the decorative features of the display.

France occupies but a narrow space in the Fisheries department, between the British and Canadian sections. One half of the enclosure is occupied by exhibits of canned fish, mainly sardines and anchovies, with photographs illustrative of canning and other processes, among them the preparation of the olive oil in which the

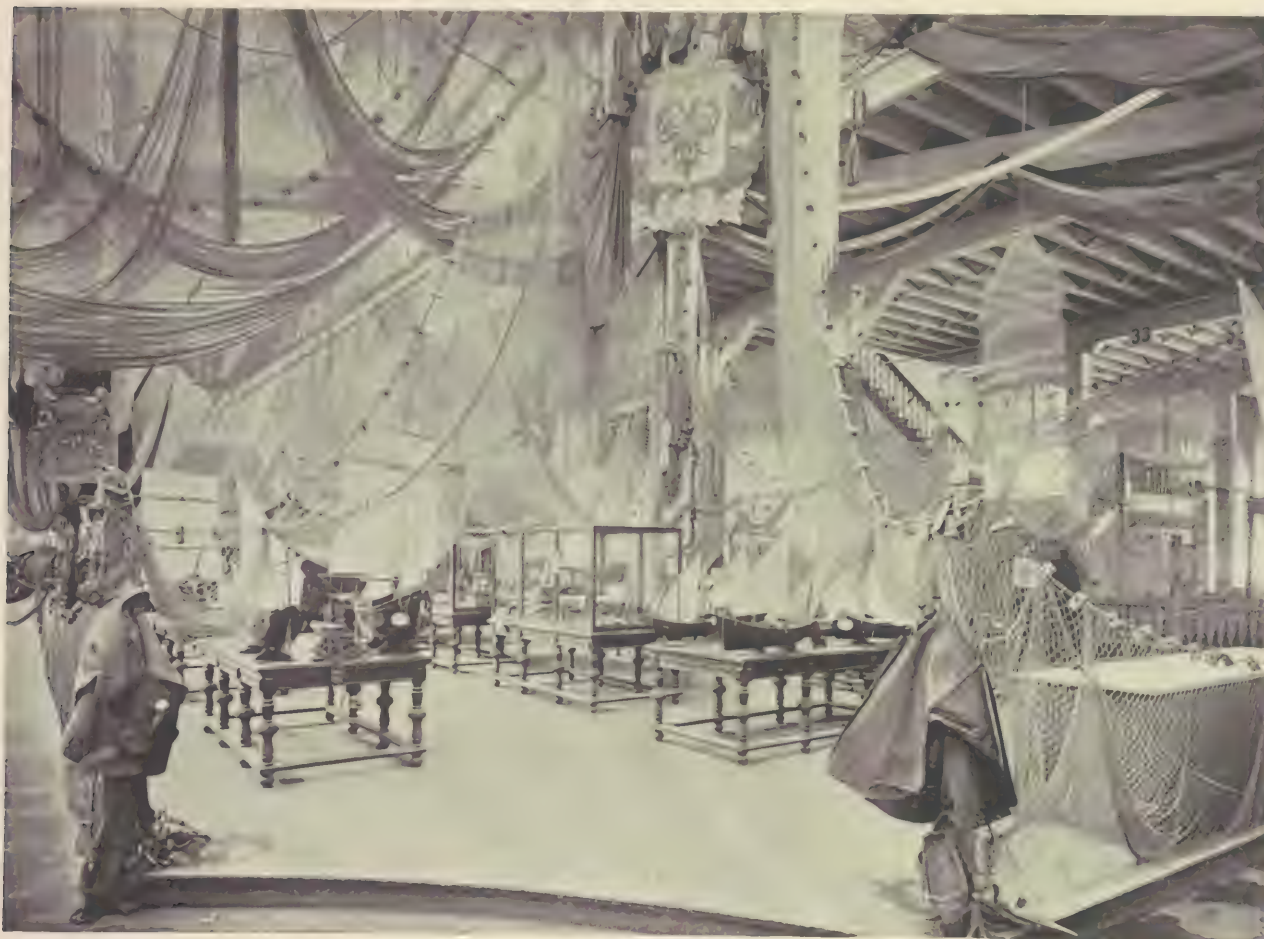


DRIED FISH. JAPANESE SECTION



In the Russian section, fronting on the rotunda and central nave, are specimens of fish, fishing craft, and apparatus from all the more prominent grounds throughout the wide domain of the czar. From the Caspian come models of full rigged vessels, and from the Astrakhan board of trade, typical Russian fishing boats, including such as ply on the Volga, and convey the fish to market. There are the fishing garments worn in various localities, with appliances for sporting fishermen, and a collection of seal-skins and articles made therefrom by the monks of the Solovetzky monastery at Archangel. Then there are numerous devices for catching fish, as hooks, nets, and traps, with the machines for making them, and the tin fish used for decoys by inland fishermen.

In rear of the pavilion is a large column of canned goods from a St Petersburg firm, adjacent to which are cases of anchovies and an assortment of sturgeon in varied forms, with caviare, isinglass, and other industrial



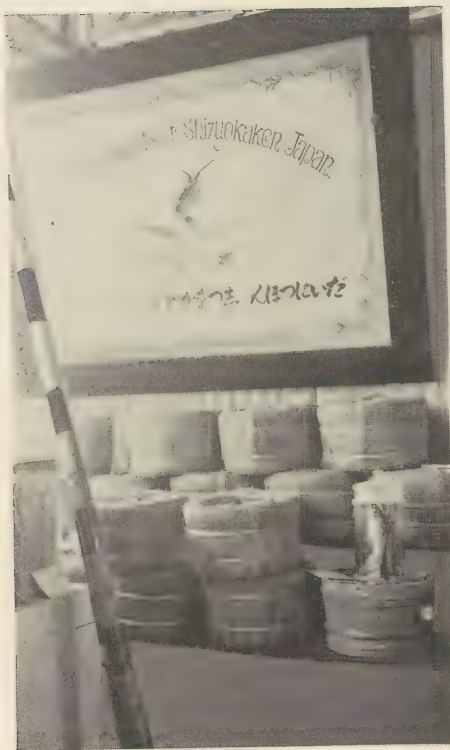
PORTION OF RUSSIAN SECTION

products. Of the specimens of fish-oils those from the Caspian sea rank first in commercial importance. Diagrams, charts, and maps are numerous, showing the location of the principal fishing grounds, and with statistical data as to the Ural Cossacks. A scene on the ocean shore, with hundreds of fishermen awaiting the signal to start, and a midwinter fishing scene on the Ural river are among the choicest photographs in this section, above which are suspended the Russian coat of arms and imperial crown, flags and netting forming the drapery of the pillars, while from the ceiling depends a large open trap-net serving as a canopy for the court.

The Netherlands, with their extensive fisheries, the herring catch of the North sea alone being valued at several million guilders a year, occupies but a narrow space in this department of the Fair. The feature of interest is a model of a herring schooner fully equipped, with the Dutch flag at the mast, the captain on the bridge, and the men in the act of hauling in the net, the vessel floating on a turbulent sea. Around it are samples of herring, gill and drift nets, hand-lines, signal-flags, and other fishing and nautical apparatus.

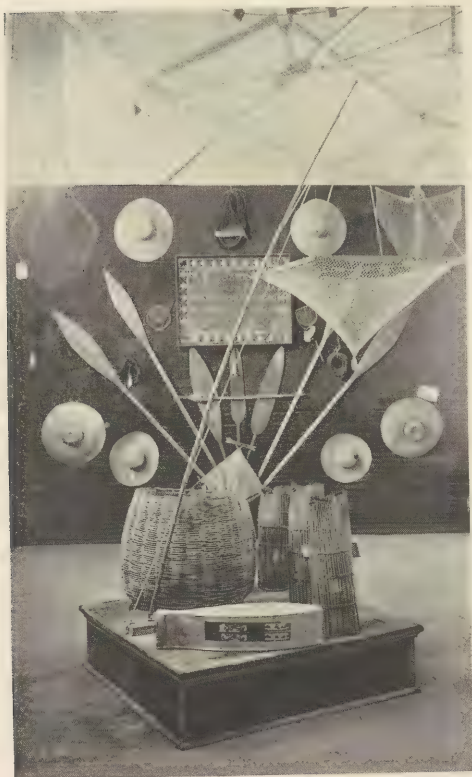
Greece completes the list of European participants, her section in the southwest corner of the gallery containing an elaborate collection of sponges from prominent Athenian firms. These are of every conceivable shape, some resembling articles of wear or household use, others in crude form, clinging to pieces of rock and





CORNER OF JAPAN SECTION

masts, with cross-piece of oars and drapery of netting, are long tiers of shelving, containing specimens of fish in all the forms of preparation peculiar to the Japanese. There are numerous samples of canned goods, as salmon, smoked herring, oysters, halibut, tai, and a large variety of such delicacies as oyster sauce, sea-urchin paste, and sharks'



BRAZILIAN NETS AND FISH-TRAPS

shell or partially covered with fungi. There are specimens thirty inches in diameter, and many of the same width, but almost as thin as the leaf of a water lily. In front of the enclosure is the national flag, and above the archway are displayed the coat of arms and crown of modern Greece.

Mexico has a tasteful exhibit adjoining the northern portal of the Fisheries building; and nowhere in the department are sea-shells and scale-work of more beautiful and varied hues. The specimens of fish, while the list is not large, are also of wondrous shades of coloring, and some of them of most fantastic form. Many are in a preserved state; but there are also assortments of dried, canned, and pickled fish, including the turbot and shrimp. In cases of steel and glass are sponges from Pacific and Atlantic waters, and pearls and fresh water shells, with articles of bric-a-brac made therefrom, in contrast with which are the bones and skin of the sea-cow. Around the enclosure are fish-traps, nets, oars, gigs, gaffs, spears, and fishing-rods. Yucatan's contribution consists of a sea-wolf weighing about 1,000 pounds, and in the rear of the pavilion is a sea-turtle more than five feet in length and as broad as long.

In a spacious enclosure fronting on the northeastern aisle Japan has arranged her exhibits with method and decorative effect. On the outer sides of the entrance-way where are Japanese

fins prepared for soup. Fish scrap is shown in rope-bagging made of the stringy portions of dried lobsters. Guano from fish products, dried sea-ears, and soup extracts in bottles, boxes, and jars form another group, while blocks of wax from whale, sardine, and herring products are some of the materials of which Japanese candles are made.

To illustrate their methods of sardine fishing and preparation for market, a number of pictures are interspersed among the exhibits. A collection of large photographs shows Japanese vessels in pursuit of the cormorant, and an oyster fishermen's village fashioned of bamboo, while the shark, cod, salmon, gold-fish, and many rare oriental species are also reproduced in graphic art.

In one shape or another, nearly all the products of Japanese waters are here displayed. Mackerel, white-fish, sardines, plaice, bonito, cod, and dolphin are shown in forms prepared for table. In bottles there are well preserved specimens of fresh and salt-water fish, including the flying-fish, gold-fish, ox-tail, and red-scorp. In alcohol are the Japanese star-gazer, black-perch, toad-fish, and carp, while shrimp soup in bottle, shrimps boiled in sea-water, abalone made into a relish for breakfast, smelts preserved in wine sediment, dried anchovies, and boneless herring, are a few of the



JAPANESE EXHIBIT



luxuries displayed in this section. The group of sea and spider crabs is worthy of mention, and the lobster without claws is somewhat of a novelty. Many articles of commerce are also on exposition, as paper made of sea-weed, scrap for fertilizing, and herring, sperm, whale, and other oils for various purposes.

In Japan all varieties of sea-weed are utilized, the yellow sea-weed being made into isinglass, of which

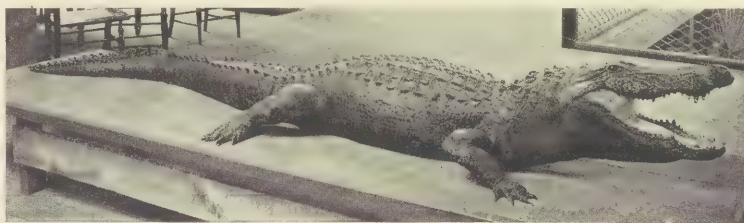
the samples resemble the product of Irish moss. From other forms are shown specimens of jellies, salads, and gelatine, while from the more valuable grades is made a preparation highly prized for soups and extracts. Boneless cuttle-fish, of which there is a considerable export, are displayed with the bones at their side in the form of small shot, used by the Japanese for canary shooting. Oyster shells of remarkable size, pearl shells in profusion and of beautiful tint, and the largest collection of small sea-shells in the Fisheries building are arranged in attractive groups.

The exhibit illustrating Japanese methods of capturing and preparing fish forms the central feature of the court. Here oddly-shaped fishing and



SHOWING WESTERN ANNEX FISHERIES BUILDING

angling boats are shown in miniature, with nets and outfit to match. Different varieties of nets, for herring, salmon, sardines, and tunny-fish are side by side with models of pound nets. Here also is a collection of curious fish-hooks, bait, flies, and trawls. Resting on a miniature ocean is a small fishing-boat, the crew of which are watching a number of decoy ducks fastened to their craft and floating on the water. A model of a furnace, with apparatus for curing fish, and an assortment of fish knives, represent Japanese modes of preparing fish for food purposes, while for extracting oils and converting the scrap into fertilizing substances, there are the old-fashioned hand-press and modern machinery, both in the form of models.



CROCODILE OF THE AMAZON

Entering the western annex from the main building, the first exhibit is that of the fish commission of Pennsylvania. In the centre of its pavilion is a miniature grotto, with a cascade descending into a pool below, and beneath the waterfall, a weir showing the method of catching mountain trout. In the pool are several fine specimens circling around the rocks and river plants, which give to it the appearance of a natural fish-pond. Surrounding the grotto are long rows of tanks, in which, swimming in their several aquaria, are most of the fish that frequent the waters of the state, including the sturgeon, pike, perch, trout, carp, cat-fish and

gar-fish. Aquatic birds are freely displayed, and there are photographs and models of hatcheries and fish-ways, with modern piscicultural processes in actual operation.

Wisconsin occupies the adjacent section, and here are fully illustrated the excellent results attained by the state fish commission. In a series of tanks are displayed, among other specimens of native fish, the small-mouthed black-bass, sun and gold-fish, carp, rainbow-trout, cat-fish, bull-head, pike, and sturgeon. Statistics and other data are arranged in interesting form,



MODERN FOLDING BOATS



VIEW FROM LOGGIA FISHERIES BUILDING





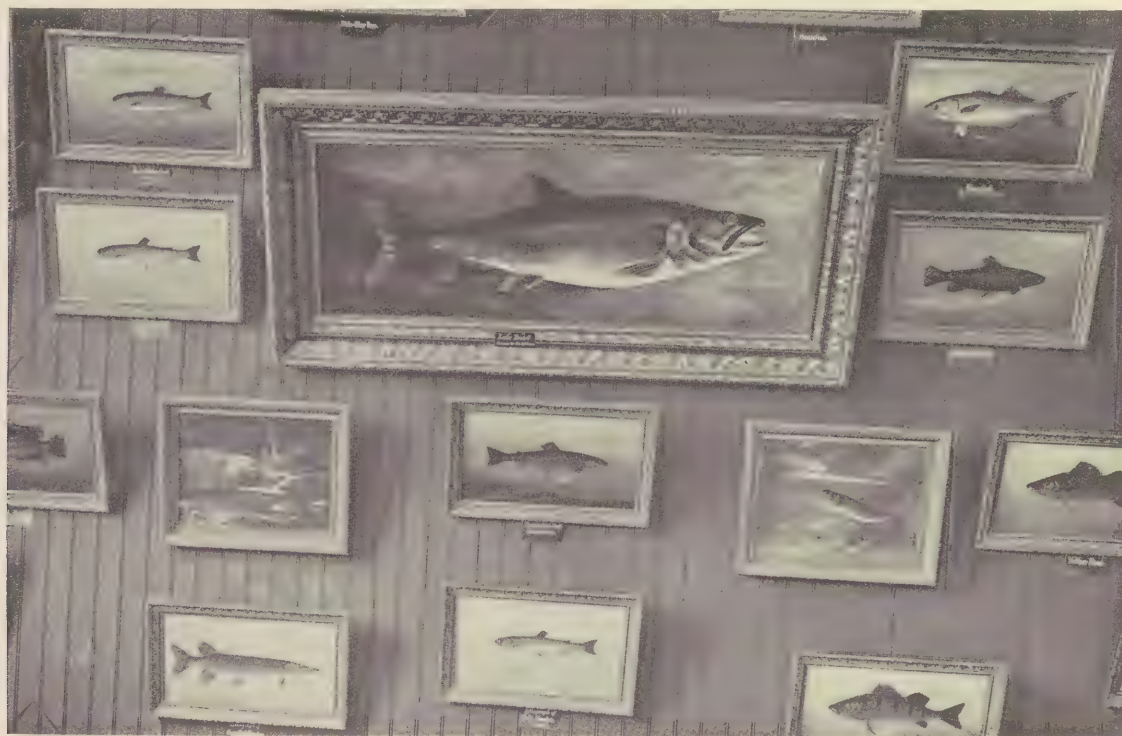
BRAZILIAN JANGUADO

and aquatic plants artistically grouped add to the realistic appearance of the scene.

Across the aisle adjoining is the Brazilian exhibit, an interesting collection of the primitive fishing implements of native tribes, near which are the tackle and appliances to-day in use on the Amazon and other fishing streams. From Paria comes a peculiar type of fishing-boat, and from a botanical museum a collection of canoes made of bark and dug-outs hewn from a single log; but the most remarkable among the fishing craft is a specimen of such as ply on the waters of Pernambuco harbor and neighboring ports. In shape it resembles a raft made of logs, and is without compass or rudder, but will safely carry its crew far out to sea, or through waters where an ordinary boat would be swamped. Another unique exhibit is of the implements with which the ganoidal order of fish are caught by spearing them between their angular scales. In one of the cases is a collection of sponges, ornamental specimens, canned goods, fish-oils, and reptiles, some of the last of brilliant hues.

In the next section are paintings of American game-fish, algæ, and other forms of sea-life, with some choice paintings of the auk, an aquatic bird which has practically become extinct. One of the latter represents the bird's egg in life size, and in graphic art are reproduced scenes on and around Funk island, off the coast of Newfoundland, where was its breeding ground. Here it may be mentioned that, some years ago, Captain Collins, chief of the Fisheries department, gathered on this island more skeletons and bones of the auk than are possessed by all the museums in the world. An oil painting of the well-known fisherman Reuben Wood shows him with rod and reel in the act of casting a fly.

Near by a Chicago firm has a display of row and sail boats, with a seamless canoe made of a substance called linenoid, and an odd looking duck-boat almost as flat as a board, but warranted to "run wherever it is a little damp." A firm doing business in Racine, Wisconsin, shows a collection of fishing camp apparatus, and an Evanston exhibitor, a fac-simile of the tent ordered by Lieutenant Perry for his expedition to the North pole. A Clayton, New York, establishment occupies a considerable space with a St Lawrence skiff and a number of canoes, row-boats, and yawls, one of which cannot be capsized, and, though not more than twenty-five feet long and with four-foot beam, weighs, with its ballasting, over 500 pounds.



PAINTINGS IN THE ANGLING PAVILION



By an Ohio and a Michigan firm are exhibited folding boats for amateur fishermen. Though dissimilar as to pattern, the general make up of the vessels is the same, consisting merely of canvas, with an oil coating which renders them impervious to water, drawn over a frame-work, and so arranged that the frame can be taken out and the canvas wrapped around it, forming a handle which a man can easily carry, the entire equipment weighing only fifty pounds.



AMAZONIAN DUG-OUTS

*Forest and Stream* has one of the most attractive exhibits in the annex. It consists for the most part of photographs of hunting and fishing scenes, forming a collection of prize competitive work from all parts of the United States. The largest tarpon ever caught, weighing more than 200 pounds, is here on exposition, together with the apparatus by which it was captured; and by way of decoration are the heads of moose, buffalo, and mountain-goat, with gill-nets, rods, lines, and flags arranged in artistic forms. In a handsome case are files of the *Forest and Stream* from 1874 to 1893, with works on hunting and fishing, fish

stories, and other interesting matter. Other features are the canoe of the patron saint of sportsmen, a model of the yacht *Gloriana*, and an assortment of Kentucky reels, none of them less than fifty years old, contributed by J. A. Henshall. A gun taken from a poacher at Yellowstone park by the editor of this periodical is one of the curiosities of the display. By the *American Angler* is also exhibited a fine collection of paintings of all the fish taken in American waters.

In the centre of the building are several private collections of rods, some with double enamel finish, of reels, tackle, hooks, landing-nets, and other articles pertaining to the craft. From Rochester comes an exhibit of automatic reels, while a Chicago firm displays its cosmic rods, some of them mounted in gold and silver. Another Chicago exhibitor has fishing-tackle with bell attachment, so that, when the fish bites, the alarm is given. By one of the participants are shown several machines in operation, manufacturing silk fishing-lines, 576 threads of raw silk being used for the making of a single line the thickness of an ordinary thread of worsted. In the angling section proper, an article never before on exposition is in the form of a flanged, flint-glass tube, in which is placed a live minnow for bait, and with a hole in the end to admit the water and to keep the fish alive.

The New England states make a fine display of the various appliances used in the fishing industry, including baits, lines, weirs, seines, and pound, purse, and gill-nets, the last showing how mackerel, herring, and cod are taken. Ohio has stuffed specimens in alcohol of all her principal fish, with aquatic birds peculiar to the state, and from the Cincinnati society of natural history are specimens of the smaller species, with all manner of aquatic insects. In the Missouri section is a complete display of indigenous specimens, including pickerel from the streams and lakes, striped-bass, German carp, small-mouthed bass from the Black river, paddle-fish, crappie, silver-bass, black-gilled sun-fish, sheeps-head, black-buffalo, sturgeon, tench, and cat-fish from the Missouri.

The Chicago fly-casting club, as a part of their exhibit, have reproduced on the shore of the north pond Izaak Walton's fishing cabin as still it stands on the banks of the Dove. From a manufacturing



DISTANT VIEW OF FISHERIES BUILDING



company of Chicago is a display of artificial flying-fish, with the process by which they are made, and among other articles, one of the finest collections of flies in the western annex.

**WORLD'S FAIR MISCELLANY.**—In the decorative scheme of the Fisheries building there are some daring features, showing that the artificer has given rein to his fancy, and yet with pleasing effect. For the capital of one of the columns, for instance, a lobster-pot suggested a design in which is found nothing inappropriate. Over one of the door-ways is a group of sportive frogs, joined hand in hand in dance. Elsewhere the purposes of the building are freely sug-



COD FISH FROM THE LOFODEN GROUNDS

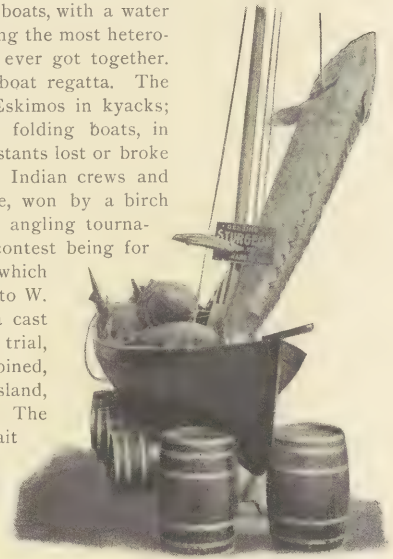
gested by its decorative themes. Around one pillar is a procession of sea-horses, and others are covered with star-fish, lizards and eels, lobsters, crabs, and turtles, with pisciform balustrades, the heads of fish resting against the railings, and their tails interlaced below.

Among individual exhibits not mentioned in the text are a couple of St Lawrence skiffs in the northwest corner of the gallery. These are from a Canadian boat firm, and are built of the finest wood, with nickel-plated rowlocks and bolts. Across the aisle from California's section is a private display of canned goods, as clams, clam bouillon, and sturgeon. In the north gallery a Wyoming inventor shows a device for conveying small fish alive to market, and near by is a private collection of birds, shells of all kinds and colors, corals, fossils, and marine curiosities.

The collection of Kentucky reels in the *Forest and Stream* exhibit is of special interest, as showing all the improvements made in this direction, for more than half a century, in the state where multiplying reels were first invented.

Between the 19th and 22d of September was held the fishermen's congress, with contests among fishermen for which prizes were awarded. After the session on the 19th the members dined together and then attended the procession of fishermen's boats on the lagoons. In front of this procession was a square-rigged whale-boat, followed by small craft representing all nationalities, including yawls from the Columbian caravels manned by United States marines and Spanish sailors. There were Eskimo kyacks, Ceylonese outriggers,

Norwegian fishing-boats, lobster dories, racing shells, canoes, canvas folding boats, with a water bicycle and other craft, forming the most heterogeneous collection of vessels ever got together. On the 20th there was a fish-boat regatta. The first race was between two Eskimos in kyacks; the second between canvas folding boats, in which three of the four contestants lost or broke their oars; the third was for Indian crews and the fourth, a free-for-all race, won by a birch bark canoe. On the 21st an angling tournament was held, the opening contest being for long distance fly-casting, for which the first medal was awarded to W. H. Babcock, of Chicago, for a cast of 76½ feet. In the second trial, for distance and accuracy combined, H. G. Leavitt, of Grand Island, Nebraska, was the winner. The third test was for black-bass bait casting, and this also was won by a Chicago man, E. E. Wilkinson. On the following day the tournament was continued, this part of the programme being conducted under



DISPLAYED BY WASHINGTON STATE

the auspices of the Chicago fly-casting club. On the 19th of October a banquet was held by the congress in the New York state building.

Until recent years fish skins and bones were removed from the premises of packers and merchants at their own expense. Cod, cusk, and other skins are now worth \$25 to \$30 a ton, this value resulting from an invention patented by John S. Rogers in 1873. While trying in vain to convert fish waste into fertilizers, he noticed a gummy substance adhering to the skins which he handled, and then it occurred to him that glue or isinglass could be made of them. Offering a few cents a barrel for skins, kept apart, he went to work, with the results indicated by the exhibits of the Gloucester company.

For several years the mackerel fisheries of New England have shown signs of depletion or desertion, due as some have it to the purse seines largely used since about 1875, before which date only the larger fish were taken by hook and line. Of lobsters the catch was also largely decreasing, through want of protection, only some 250,000 cases being canned in 1892, against twice that quantity for 1890. Halibut were growing scarcer every season, though the deficiency was partially made up from Icelandic fisheries, whence more than 700 tons were taken by American craft in 1891, notwithstanding legislative prohibition. Herring showed no signs of decrease, 24,200,000 of these fish being handled in Boston markets alone. Of haddock the largest take recorded was in February, 1891, when a



FISHING BOATS OF TO-DAY

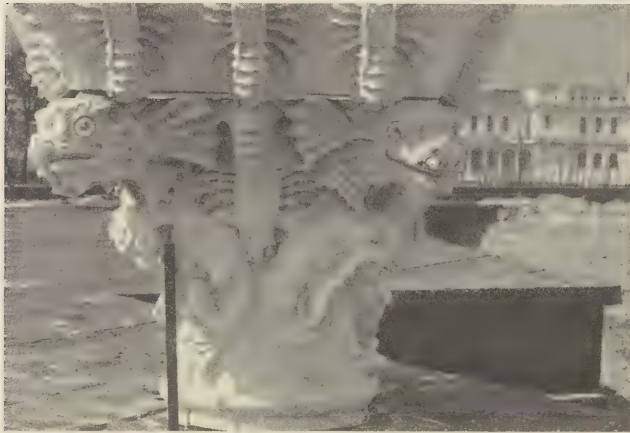
schooner caught on the Cape Shore grounds 132,000 pounds, besides an equal quantity of other fish.

An acre of good fishing-ground, it has been said, will produce



more food than an acre of the best farming land. This is as true to-day as it was two or three centuries ago; for except in a few vari-

fish store was opened in 1807, and the first fresh fish store in 1835, averaging more than \$15,000,000 a year.



OUT-DOOR EXHIBIT

eties there has been no very serious diminution in the supply of fish in United States waters, and all the species found in pilgrim times exist in abundance to-day. Meanwhile our fish trade has grown to enormous proportions, that of Boston, for instance, where the first

During the cod-fishing season at the Lofoden islands, in the months of February and March, the average catch is about 30,000,000 of fish, and of such importance is this industry that the number taken each day is telegraphed to all the principal cities in the kingdom. On a picturesque harbor in the heart of these islands is the town of Stamsund, where are the cod-liver oil works of Peter Möller, described in Paul B. du Chaillu's *Land of the Midnight Sun*. By Möller was originated the steam process of preparing this oil from fresh, clean, healthy livers, and without nauseating smell or taste. When the midnight sun appears in all his radiant splendor, illuminating some of the most romantic of Norwegian scenery, the islands are visited by thousands of tourists. Here snow-clad peaks rise in almost perpendicular lines for thousands of feet above the ocean. For most of the year the ravines are filled with snow, and thence numberless streams descend in foaming cascades to the fjords below.

The edible sea-weed mentioned in the Japanese exhibit is dissolved, when boiled, into a glue-like liquid, but of palatable flavor. When used for soup it is cut into shreds which resemble curls of light, fluffy hair. For one purpose or another the Japanese use almost every form of sea product. The octopus and squid are eaten, and the toad-fish is prized for its medicinal properties, the soup made therefrom being freely used by invalids. All these are on exposition in this section.







## CHAPTER THE EIGHTEENTH

### TRANSPORTATION



WHILE here and there exception may be taken to the arrangement and combination of exhibits, as the grouping of musical instruments in the department of Electricity, and of mail-bags and Leghorn hats in that of Liberal Arts, it is generally conceded that the entire Exposition and each of its divisions and subdivisions have been planned with consummate skill. And nowhere is this more apparent than in the Transportation building. Here, as elsewhere, but here especially are features that claim the attention of every class of visitors; and as the chief of this department states, "Among its main purposes was to fascinate and attract by the presentation of the most striking contrasts; to educate by showing the wonderful achievements of engineering science, and the great results developed from apparently simple discoveries and inventions."

curiosity, the exhibits grouped in this department are of surpassing interest; for here is presented in most attractive form a complete history of all the known methods and appliances for travel and transportation, barbarous, semi-barbarous, and civilized, from the pack-animal to the vestibuled train, and from the dug-out of the savage to the swiftest of trans-atlantic steamers. In no branch of human endeavor, except in the application of electric power, has such progress been made as here is shown, and nowhere than in this country of magnificent distances has the annihilation of distance been more nearly approached. Yet achievement thus far is but a foretaste of that which is to come; there are those now living who may journey by rail from Paris, possibly without change of cars, to a great world's fair to be held, let us say, in New York, toward the middle of the coming century.<sup>1</sup>

The connection of the railroad systems of the world by way of Bering strait is by no means the chimerical project that some would have us believe, nor one that may not ere long be accomplished.







LOOKING TOWARD THE GOLDEN DOOR

architectural symmetry and proportion were made in a measure to give place to considerations of practical utility, that except for the Fisheries building, its width, in relation to length, is smaller than in any of the principal structures, and that its exterior aspect differs essentially from all the rest.



FIGURES BY BOYLE

The Transportation building proper was erected on the southwestern bank of the lagoon which surrounds the wooded island forming a portion of the Horticultural grounds. Opening into it and covering a larger area is the annex, extending westward almost to the limits of the park, and in which are the principal railroad exhibits of the United States, Great Britain, and Canada. In the main façade, separated by the lagoon from the hall of Manufactures

"Of all inventions," remarks Macaulay, "the alphabet and the printing-press alone excepted, those inventions which abridge distance have done most for the civilization of our species." Such appliances are in truth the prime factors of commercial and industrial growth, and never before was such an opportunity for observing their development in all their manifold stages.

In structural design the Transportation building, with its spacious annex, is one of the simplest and most unassuming of all the Exposition edifices, and yet with a richness of decorative forms that relieves it from poverty of design. But in covering the allotted space of fifteen and a half acres, its architects, the Chicago firm of Adler and Sullivan, had first to consider the character of the display whose housing was to be intrusted to their care, largely consisting of rolling stock and other cumbersome exhibits. Thus it was that



STATUARY TRANSPORTATION BUILDING

The bridging of that shallow strait by way of the Diomedé islands, almost in the middle of its narrowest part, presents no such engineering difficulties as were encountered by the artificers of the Central and Canadian Pacific railways. With the latter system the line would connect by way of Alaska, for the most part across a level plain, and on the Siberian side would skirt the base of the Stanavoi

mountains, avoiding the tundras or marshes between them and the sea. To Vladivostok, on the sea of Japan, Russia's principal naval station on the Pacific, a railroad is already nearing completion, and such a route, if operated only for a few months in the year, would open for settlement or industrial purposes a vast extent of unoccupied territory, much of it rich in resources.





COWBOY IN FRONT OF BUILDING. PROCTOR

Of all the Exposition buildings this is the only one whose exterior has been treated with color decorations. Beginning at the base with a light, delicate red, the polychrome treatment culminates in the golden doorway and the spandrels of the arches, in the centre of which are winged female figures, typical of transportation methods. This portion of the design is executed with singular delicacy of technique, the hues interblending in thirty different shades, and yet with such harmony that the entire effect is that of a single painting. On the northern side is a line of statuary representing great inventors; on the south, on either side of the doorway, are statues of Stevenson, Watt, Vanderbilt, and others, with figures emblematic of land and water transportation, and on the east are other symbolical groups.

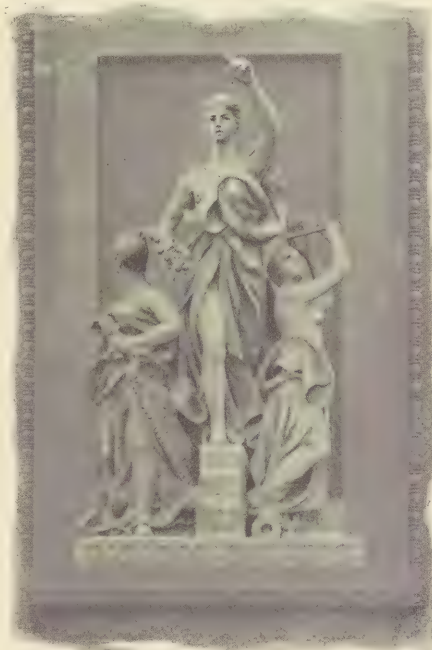
The interior resembles somewhat an ancient basilica, the general plan partaking of the Romanesque, though with features suggestive of the French school as represented in the Ecole des Beaux Arts. But whatever their motif, the artificers of the Transportation hall, by whom

were also designed the Auditorium and other prominent buildings recently erected in Chicago, have here adopted a style

of treatment at once simple, chaste, and refined.

At right angles to the main interior façades are lines of rails, separated by passage-ways, and so spaced that two pairs give to each of the bays a width of thirty-two feet. This, says one of the Exposition architects, "became the module of dimension and the common divisor of the plan, forming the basis of the whole architectural scheme." In the annex, a plain one story building, are also railroad tracks, perpendicular to the

and Liberal Arts, is the point of architectural emphasis, "the golden doorway," enclosed by a fretted arch or series of arches resplendent with gilding, and with a chaste embroidery of bas-reliefs and arabesques. Around this portal are symbolic groups representing ancient modes of transportation as contrasted with the luxuries of modern travel. On either side are balconies and terraces, the latter with small kiosks, somewhat in the Mogul style of architecture. The expanse of frontage is further relieved by smaller doorways on either side of the more spacious entrance, and by allegorical figures representing the purposes of the building. At the ends are still other doorways, with several openings from the rear façade, the former with projecting pavilions richly decorated and flanked as in front by terraces. The roof, which is in three sections, the central one rising above the others, and with walls so pierced as to form an arcaded clear story, is surmounted by a cupola 160 feet in height, and surrounded by balconies to which, as also to the galleries, visitors are conveyed by swift-running elevators from the ground floor. From the higher balconies is viewed to the best advantage the city of the Fair.



GROUP BY BOYLE



A SECTION OF FRIEZE



transfer table, by the use of which the heaviest of rolling stock was readily placed in position. Along the central nave and elsewhere are long lines of locomotives, burnished to an almost painful degree of brightness. Add to this an endless array of other massive exhibits, to which an imposing vista of colonnades imparts a further emphasis, and we have in the hall of Transportation a spectacle which the visitor does not readily forget.

It was one of the purposes of this department to furnish, in a series of object lessons and with a wealth of detail such as was never before presented in written or illustrative form, a history of that science in all its details, such as carries the mind back from the year of 1893 to cycles long antedating the reign of the Pharaohs. Here, in its three main divisions of railways, vehicles, and vessels, are all known appliances for the conveyance of man, and that which man and nature have produced, with specimens or models of the machinery, and of all else whereby have been evolved the ancient and modern systems of locomotion and transportation. In the railroad groups are included mountain, spiral, and ship railways, with locomotives of every kind, from



SHOWING SECTIONS OF UNITED STATES VEHICLE AND BRITISH MARINE DIVISIONS

the one driven by George Stephenson to the hugest of steam leviathans. There are freight and passenger cars; drawing-room, parlor, and dining cars; officers' and private cars; mail, baggage, and express cars; working and construction cars; and if there be any other than these, then are they here on exposition. Here also are illustrated railroad construction, maintenance, equipment, operation, and management, with the history of railroads, exemplified by a collection of rolling-stock and relics, some of them more than half a century old. In the vehicles group are such as are or have been used on common roads, from an ancient war-chariot to a tally-ho coach, from a Chinese wheel-barrow to a brougham and victoria, and from the lumbering Indian bullock-cart to the sleigh and the swift-running bicycle. In the marine division are represented vessels of every form and size, from an African pirogue to an ocean-going steamer, with models of war-ships and war-boats selected from all the nations of the world.

Says the chief of the department, Willard A. Smith: "It is but moderate and fair to state that the railway division has never been approached in extent, variety, and general interest; that the vehicle division is a surprise even to the best informed, and that no previous marine exhibit of the many which have been held





VIEW FROM CENTRE GALLERY LOOKING NORTH

more than seventy-five carriages made by the most famous European builders. When this department was organized, no American, not immediately concerned in the work, believed it could be made other than purely American, and not a single country asked for space. Extremely discouraging was the reluctance with which two great foreign powers granted the privilege of reserving—not assigning—for each 15,000 square feet. Briefly, it may be said that the plans adopted have so won their way that more than one third of the entire space was awarded to foreign countries, with applications for additional areas, some of which we were compelled to refuse."

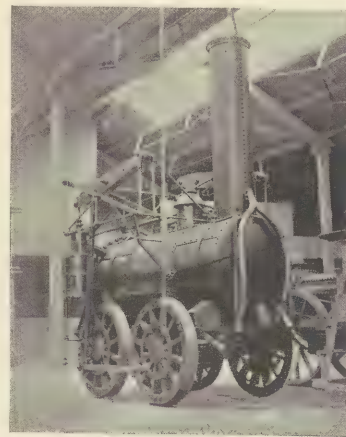
The railroad exhibits are the most prominent feature in the department of Transportation, including locomotives, cars, railroad trains, and railroad materials and supplies, contributed by many companies and by all the nations whose systems of intercommunication are most fully developed. Here is represented a branch of industry wherein is invested a capital of \$28,000,000,000, of which more than one third was supplied by the United States. There is not enough money in the world, including its entire metallic and paper currency, to purchase one half of its railways, and the aggregate banking capital of all the nations forms but an insignificant amount as compared with that which has been sunk in railway enterprise. To civilized communities the railway is almost as necessary as is the circulation of blood to the individual, not only furnishing the means of locomotion, but bringing to our doors nearly everything we eat or drink or wear. Few there were who foresaw the marvellous events accomplished by railroad development, from the time when Stephenson drove his first locomotive at the rate of a dozen miles an hour, with a signal man riding in advance, until to-day, 60,000 locomotives speed at thrice that rate over 350,000 miles of track. And even in these closing years of the century, railroad enterprise is almost in its infancy, its benefits extending to less than one half of the habitable globe. In the entire continent of Africa there are less than 4,000 miles of road; in eastern and northern Asia there are less than 3,000, while South America and Australia have but a few thousand miles. Yet each of these regions could support a larger population than that of the United States, where a few of the leading corporations control a larger roadway and a heavier volume of traffic than all these countries combined.

In passing in review the railway exhibits of the United States, I will begin with that of our pioneer enterprise, the Baltimore and Ohio company, in whose elaborate display, almost in the centre of the annex, is a collection of the railways of the world, from those of most primitive pattern to the Royal

compares with this one in variety of detail and number of striking features. Two years ago it would certainly have been deemed improbable and even impossible, that we should secure from Europe a number of locomotives and cars, besides a large amount of railroad material and machinery, in view of the fact that there is no market in this country for such things. Almost equally improbable was considered the assembling here in an inland city of models of the world's navies, and of

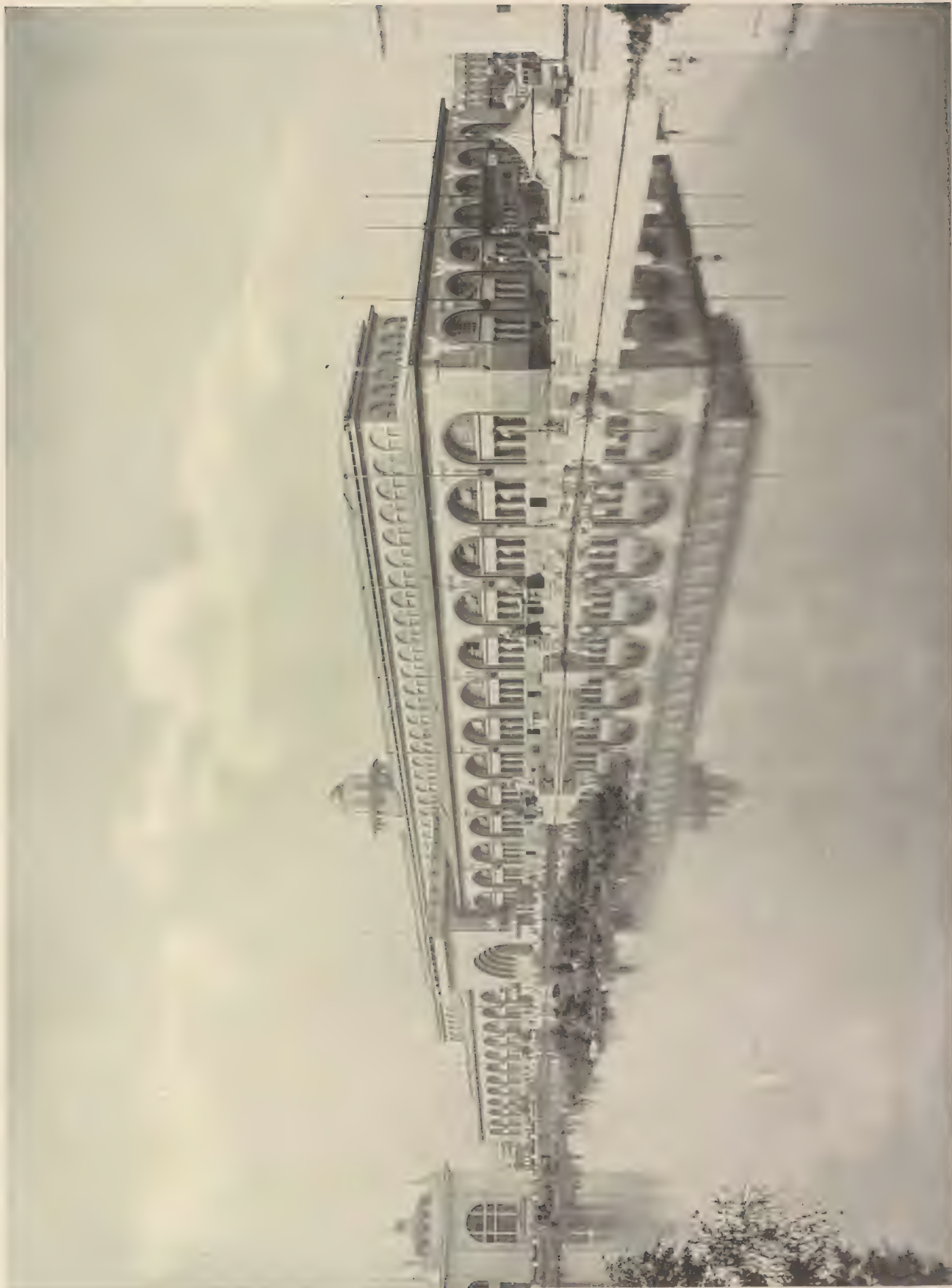


STOURBRIDGE LION, BALTIMORE AND OHIO HISTORICAL EXHIBIT



MODEL OF HUDSON VALLEY COAL ENGINE





TRANSPORTATION BUILDING FROM THE WOODED ISLAND



Blue Line express now running between New York and Washington. First, however, it may be of interest to sketch briefly the history and condition of our railroad systems, with their 175,000 miles of track, or more than one half the total mileage of the world.

In 1827 was laid the first rough track between Quincy and Boston, for hauling granite by horse-power for the Bunker hill monument. A year or two later a locomotive resembling that which Stephenson built was shipped from England for experimental purposes. It weighed about five tons, and drew on a level road-bed near the town of Honesdale, Pennsylvania, a load of some 30 tons, at a maximum rate of 25 miles an hour, this being considered at the time a marvel of speed and power. Early in 1830 was opened the first section of



EXHIBITED BY THE BOSTON AND PROVIDENCE COMPANY

the Baltimore and Ohio railroad, with wooden rails fastened by bars of iron. It was not until the following year that sufficient cars were built for regular passenger travel, and in July of that year was published in a Baltimore journal the first railway time table issued in the United States. It read in part as follows: "A brigade of cars will leave the depot on Pratt St at 6 and 10 o'clock A.M., and at 3 and 4 o'clock P.M., and will leave the depot at Ellicott's Mills at 6 and 8½ A.M., and at 12½ and 6 P.M." Thus did the burghers of Baltimore journey in their brigades of cars, still drawn by horse-power; for not until 1833 were steam-engines placed on the road. Meanwhile, in October 1831, the first passenger train drawn by a locomotive ran between Albany and Schenectady on the Mohawk and Hudson line. The engine used was the *John Bull*, of historic fame, now occupying a place of honor among the exhibits of the Pennsylvania Railroad company.

As to the discomforts attending these primitive modes of travel, the following extract from *Gilpin's Cosmopolitan Railway* may serve as a description: "The cars were of the rudest construction, resembling at first the old-fashioned English stage-coach, and with none of the modern appliances. The seats were narrow, stiff-backed and uncushioned, and the roof of the car so low that in winter ventilation was impossible. At each end a stove warmed the poisonous atmosphere, and at night a single tallow candle gave forth a dim and flickering light. The springs were of the most primitive pattern, causing the vehicle to jolt and the sashes to rattle like those of a modern hotel coach, so that reading and conversation



PROCTOR'S INDIAN AND HORSE





GROUP ON BUILDING. BY BOYLE

a fac-simile of Sir Isaac Newton's steam carriage, fashioned in 1680 on principles suggested by Hero's *æropilon*, or steam ball, which latter invention bears date 130 B.C. Newton's apparatus consisted of a copper boiler mounted on a frame which rests on wheels, a pipe with plug valve pointing backward from the boiler, and with the operator seated in front, the reactionary force of the steam, generated by atmospheric resistance, being expected to furnish the motive power. Whether Sir Isaac's carriage could ever be induced to move, history recordeth not, and it can only be said that, if the one exhibited at the Fair is a faithful reproduction, it does not look as if it could.

Next is a model of a steam carriage, in which is partially reproduced Denis Papin's invention of 1690. The former was the contrivance of a French army officer, and was intended for military service. It was one of the most cumbersome contrivances that man could devise, its heavy frame mounted on three wheels, the huge kettle-shaped boiler suspended over the single forward wheel, with single-acting cylinders, steering, and other apparatus, the operator seated on a platform, guiding the machine by a double-ended lever connected by gearing with the frame-work of the driving wheel. Greatly to the annoyance of mankind and the terror of horse kind this unwieldy engine made its appearance in the streets of Paris about the year 1769, and was there re-

were not to be thought of. The dust was intolerable, and as there were neither spark arresters on the engine nor screens at the windows, the traveller emerged from his car smutted and begrimed as though he had passed the hours in a blacksmith's shop."

From a score of miles in 1830 the length of track in operation increased to nearly 30,000 miles in 1860. During the time of the civil war less than 3,000 miles were constructed; but in the seven years ending with 1872, the total mileage was almost doubled, and thenceforth rapidly increased until, as I have said, in 1892 there were 175,000 miles of road-bed. Of this about one third lies west of the Mississippi river, a region where in 1850 there was not a single mile of track. In the United States there is on an average a mile of railroad to every 500 inhabitants, while in Europe the average is a mile to every 2,000 inhabitants, the volume of traffic in proportion to population far exceeding that of European countries. The operations of the larger companies are on a colossal scale, some of them handling 40,000 or 50,000 tons of freight a day, and with a corresponding amount of passenger travel. The total of freightage is probably not less than 600,000,000 tons a year, and of passenger fares about 500,000,000, from which the gross earnings may be estimated at \$1,100,000,000, and the net earnings at nearly one third of that amount.

In the exhibit of the Baltimore and Ohio company, occupying nearly an acre of floor space, is an almost complete illustration of railroad development, both as to engines and cars, the former arranged as models or originals of locomotives that have become historic. The collection begins with



STATION FOR ELECTRIC LAUNCHES



garded as a public nuisance, until one day turning a corner near the Madeleine it came to the ground with a crash, was seized by the authorities, and is now one of the curiosities in the Conservatoire des Arts et Metiers.

Even more ponderous was the engine constructed in 1784 by William Murdock, an engineer employed by the firm of Bolton and Watt. Its boiler rested on a frame in rear of the driving axles, the flue passing through it, the fire box beneath, and the cylinder above, the valve being worked by the walking beam. Of this there is a reproduction on a larger scale in the Baltimore and Ohio collection; but for what purpose it was built, except to demonstrate the possibility of running carriages by steam, does not appear. Certain it is that it could not be intended for practical use.

Three of the Trevithick engines are reproduced, one of them being actually used about the year 1808 as a locomotive; and with it are sections of rails, short, rusty pieces of iron, and the stone ties which preceded those of wood. Then comes the steam dredge which Oliver Evans constructed a few years earlier near Philadelphia. Passing by other models, among them a Blenkinsop engine provided with a cog wheel, the famous *Puffing Billy*, and the first one patented in the United States, we come to Stephenson's *Rocket*, which has been a thousand times described. Not far away is the *Stourbridge Lion*, built in 1829, and the first used in the United States for locomotive purposes. This is of the grasshopper type, of which there are many specimens in the collection, all somewhat resembling a primitive fire-engine mounted on a flat car. In models or originals are many engines which have done good service in their time, among them the *Traveller*, the first freight engine of the Baltimore and Ohio road; the *Mazeppa*, the first with horizontal cylinders; the *Hercules*, the first with equalizing beams; the *Peppersauce*, the first to climb Mount Washington; and a Perkins engine built in 1863, and removed from active service to take its place in Transportation hall. All the improvements made within the last three score of years are included in this exhibit, which ends with a Royal Blue express



PALACE SLEEPING CAR



SPECIMEN OF PARLOR CAR

train, at the head of which is one of the most powerful of compound engines, manufactured at the Baldwin Locomotive works. Here are shown progressively and in detail the various stages of development, how the first horizontal boiler replaced the vertical boiler, and the engine whose steam passed upward through the smoke-stack superseded the clumsy device in which a blower was used to aid combustion. There is also a collection of rails, from such as were laid without flanges more than half a century ago to the modern rail of Bessemer steel. Finally is shown in photographic form the railway machinery used in every quarter of the world.

Adjoining the section occupied by the Baltimore and Ohio railroad is the main exhibit of the Pullman Palace Car company, in which the most attractive features are two complete exhibition trains, a limited and a day train. Both are of finished workmanship, representing in its highest form of development a purely American invention, one opening a new field of progress in which no tentative efforts had been made in other lands. And yet it may be said



that, like other valuable inventions, this was almost the result of an accident. Some thirty-five years ago, while travelling by night from Buffalo to Westfield, George M. Pullman lay awake, bethinking him how to convert the rude sleeping car then in use, into a comfortable dormitory on wheels. The idea grew upon him, and in due time he rented a workshop at Chicago, hired skilled mechanics, and applied himself in earnest to the task. The result was the car *Pioneer*, the first one built, and costing \$18,000, or more than four times as much as the best before constructed. Though at first encountering strong opposition, it gradually revolution-



OBSERVATION CAR



SLEEPING ACCOMMODATIONS

ized existing theories of construction, for nowhere else could be found such a combination of strength and beauty, with minute elaboration of devices for ease and comfort. From this small beginning was developed the Pullman enterprise, with property valued in 1893 at \$60,000,000, and with more than 2,500 sleeping, parlor, and dining cars, carrying 5,000,000 or 6,000,000 passengers a year over the 125,000 miles of railroad under contract with the company.

In all the Transportation department there is no more handsome exhibit than the Pullman Columbian exhibition trains almost in the centre of the annex. At the head of the limited train is one of the most powerful of compound engines, named *Columbus*, from the Baldwin Locomotive works at Philadelphia. First is the baggage and smoking car *Marchena*, with bath-room, barber's shop, writing-desk and library. Next is the dining-car *La Rabida*, finished in the finest of vermillion wood imported from Central America, with windows of stained glass in delicate hues, seats elaborately carved, and kitchen which is a model of cleanliness and condensation of space. There are the sleeping car *America* and the compartment sleeping car *Ferdinand*, both marvels of comfort and decorative skill, the latter finished in Pompeiiian red, and

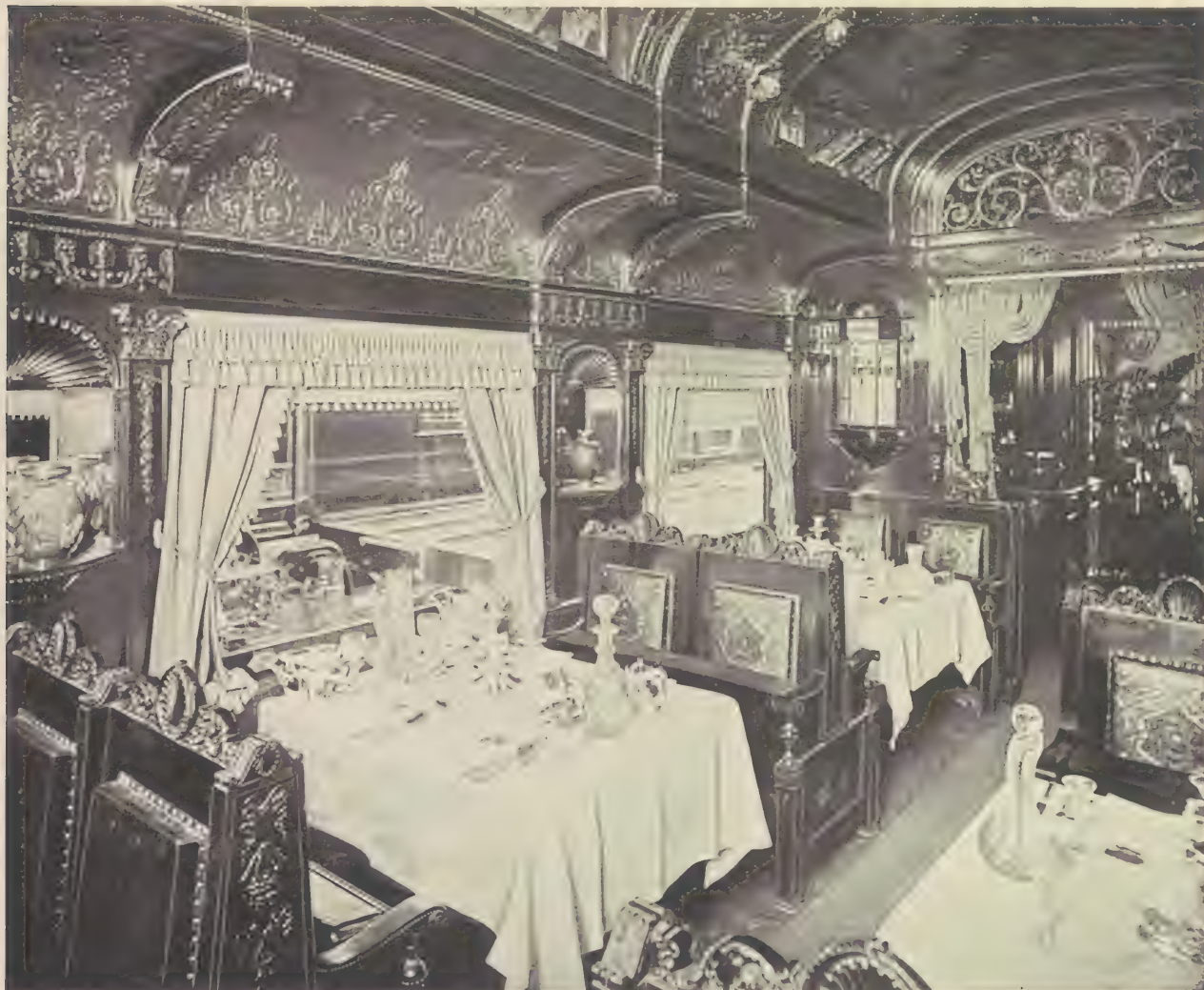


FOR THE POSTAL SERVICE



satin wood, artistically carved and polished to a mirror-like brightness, each of its compartments a miniature boudoir, and with separate design and color scheme, as in ivory and gold, in olive green, in blue and satin wood, all with upholstery of silk brocade. The last is an observation car, named *Isabella*, a portion of which is furnished as a drawing-room, with large railed platform at its end. In this train it would almost seem that the perfection of comfort and convenience had been attained, many skilful devices, though small in themselves, contributing to the general effect. All the compartments are provided with toilet appliances, and with water, hot, cold, and iced. The electric lights are shaded with silken fringe; the entrance ways paved with mosaic, and vases placed on stands remain undisturbed by the motion of the train; so smoothly run these palace cars, the very embodiment of the luxury of modern travel.

In the second train is a mail car of novel pattern, its walls finished with white enamel, with mail boxes of cherry, and all the appliances of railroad postal service. Next is the passenger coach 1893, with the softest



DINING-CAR, VESTIBULE TRAIN

of high-backed cushioned seats, the parlor car *Maria*, with its sumptuous appointments completing the railroad exhibit. All the cars are equipped with the Pullman vestibule, forming a solid yet sinuous train, under a single roof, and allowing the traveller to pass in comfort as in his own home, from sitting to dining or sleeping room. Here for the first time is shown the application of the vestibule system to the entire width of the cars, by extending the sides and enclosing the ends, with an original and ingenious arrangement of entrance doors, and with trap doors above the steps, whereby is avoided the exposure to wind and weather on ordinary cars with open platforms and projecting hoods. A still more important advantage is that it affords practical immunity from danger to passengers even in case of violent collision.

An entirely new and conspicuous feature of these two trains, and one which attracted wide and favorable comment during the Exposition, is the application of the vestibule to locomotive tenders, making it impossible for either the tender or the car next to it to be elevated to a position where one would telescope



into the other. By its use the locomotive is made a factor of safety in resisting shocks due to collision; and the train is made solidly continuous, practically ensuring the mail clerks, baggage and express men, and engine men, as well as the passengers, from injury in case of collision.

In the Pullman group is also a set of standard six-wheel trucks, with street cars of various patterns, one



SMOKING CAR VESTIBULE TRAIN

of them an electric car with upper deck, such as are now in use at Washington. In the centre of the main building, fronting on the longitudinal nave, is a model of the workshops, stores, and dwellings of the town of Pullman, with its 12,000 inhabitants, more than half of whom are operatives actually employed at the works. Of these, further mention is made under the heading of World's Fair Miscellany.



DINING CAR, NEW YORK CENTRAL VESTIBULE TRAIN

South of the annex is the pavilion of the New York Central company, a separate edifice in the form of a triumphal arch connecting two side structures, one of them furnished as a waiting room, its walls hung with scenic paintings of landscape views from its lines of route, and the other serving as an office, where information is furnished as to the company's operations and exhibits. In the court between, with its flooring of mosaic, is a model of the Empire State express engine, 999, the original of which is stationed on tracks outside the building. For this locomotive, which is said to be the fastest in the world, such impossible rates of speed have been claimed as a mile in 32 seconds or 112 miles to the hour. The 999, built





LOCOMOTIVE "DE WITT CLINTON" AND TRAIN, PIONEER OF NEW YORK CENTRAL

for the occasion at the Schenectady Locomotive works, is an eight-wheel engine, long-limbed as a race-horse, with seven-foot driving-wheels, and of plain but handsome appearance. Beneath its huge boiler, with its heating surface of 1,700 square feet, there is room for a tall man to stand upright, while the diminutive smoke-stack is on a level with the curved roof which shelters the engineer. On the tender an inscription indicates the service for which it is destined, the engine and tender weighing together

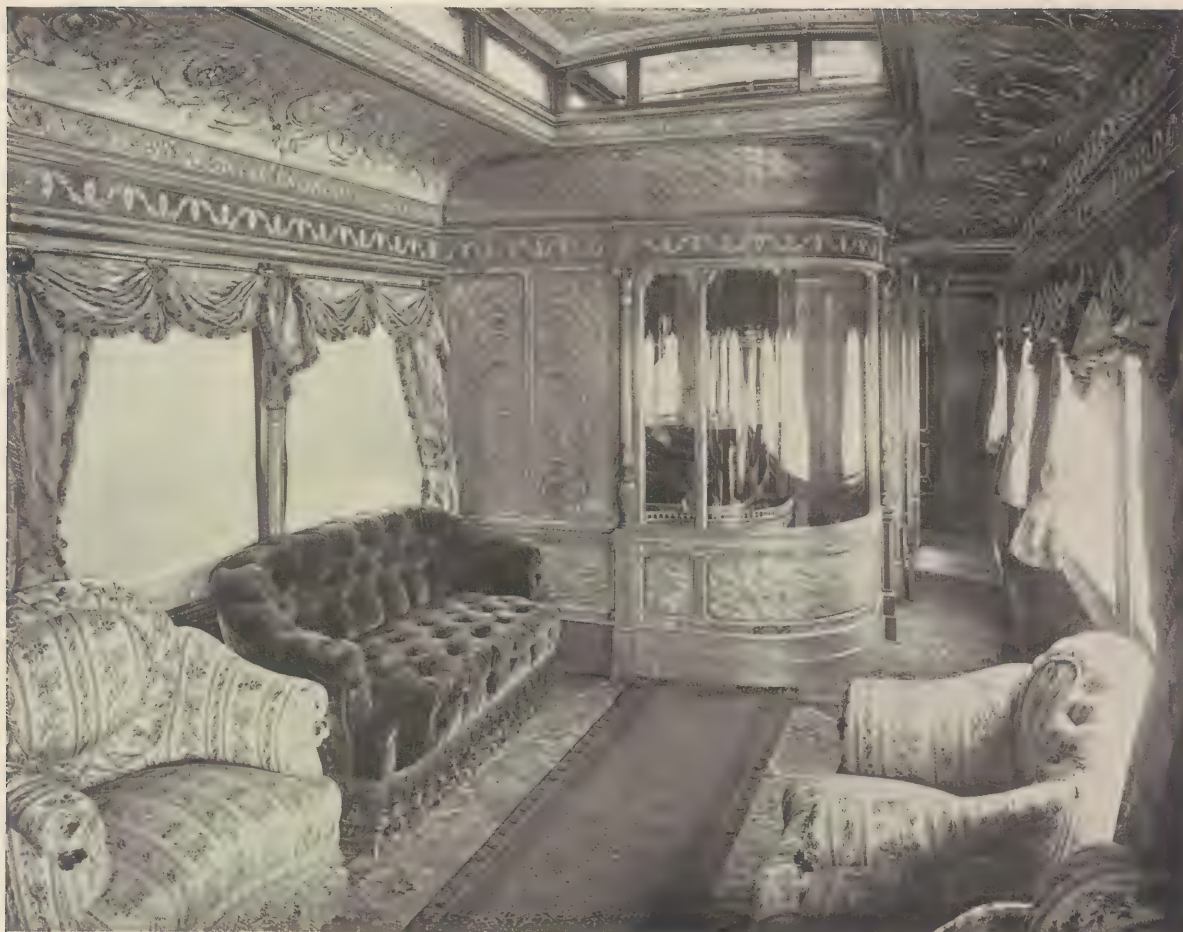
more than 100 tons, and yet running as smoothly as a drawing room coach. The accompanying train consists of Wagner vestibuled cars, and includes drawing room, sleeping, dining, and smoking coaches, most of them decorated in Louis Quatorze style, with elaborate carvings and color scheme of gold, yellow, and pale green.

In contrast with this steam leviathan and its train of palace cars, stands at its side a reproduction of the *De Witt Clinton* locomotive, with its ramshackle cars, the former having fallen to pieces years ago, though some of the fragments were pieced together and the engine reconstructed from the original specifications. For the coaches the following is a portion of a contract, dated the 23d of April, 1831: "To the commissioners of the Mohawk and Hudson Railroad company, Sirs:—I propose and agree to furnish for said railroad company six coach tops, to be finished and hung in the style of workmanship generally adopted in Albany and Troy for post coaches; a baggage rack and a boot to be hung at each end; the length of coach body to be 7 feet and 4 inches, 5 feet wide in the centre and 3 feet 8 inches between the jacks; to have three inside seats, the back of the end seats to be stuffed with moss and all the seats to be stuffed with hair. The whole to be completed



NO. 999, THE GREAT ENGINE OF THE NEW YORK CENTRAL COMPANY





DRAWING ROOM CAR, NEW YORK CENTRAL COMPANY

as aforesaid for the sum of \$310 each. It is understood that the above coaches are not to be provided with lamps or mud leathers."

Here in truth we have the climax and anti-climax of railroad travel, in the palace cars of the Empire State express, costing perhaps \$30,000 apiece, and these primitive coaches of three score years ago, costing about one hundredth part of that sum, with their moss-stuffed seats, and without lamps or "mud leathers." As to the engine there is nothing whereunto we can liken it, unless it be to an old fashioned machine that has stood in the rain since the days of the colonial era. Its boiler is hump backed; its tender filled with water barrels, and its overgrown smoke-stack is without spark-arrester, cinders falling in showers on the passengers, who protected themselves with umbrellas, and at times used their coats to extinguish incipient fires. Thus did the good citizens of New York, including Erastus Corning, Governor Yates, and the high constable of the state,

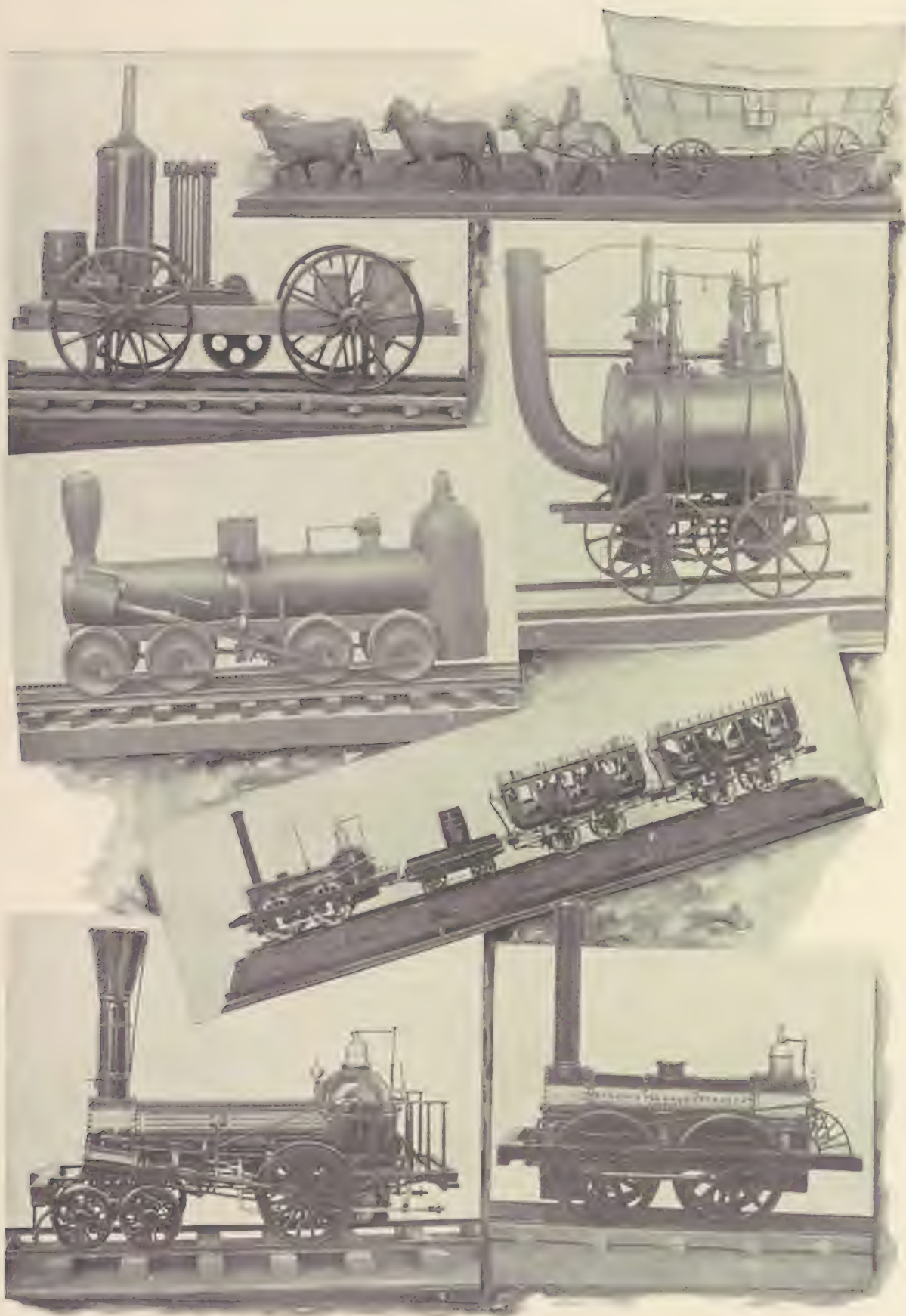


COACH OF "DE WITT CLINTON" TRAIN

travel on the pioneer trip from Albany to Schenectady on the 9th of August, 1831, the conductor seated in rear of the tender, and giving the signal to start by blowing a large tin horn. It may have been an interesting but it certainly was not a comfortable excursion; for we learn that the tops of the passengers' umbrellas were burned through, and that each one seized his neighbor's clothes to extinguish the brands that came from the pitch pine fuel, while, when a stop was made for water, the constant jerking caused by the slack of the cars was relieved by wedging rails between them and tying them fast with packing twine.

Near the pavilion of the New York Central, the Pennsylvania Railroad company erected a tasteful edifice of its own, in the form of a passenger station, behind which a track was laid with standard rails, and a signal tower and foot bridge overhead. Here also was displayed a historic and technical collection, but relating only to lines which have been associated with or merged in its system, showing in models, relief maps, relics, and illustrations in graphic





PENNSYLVANIA RAILROAD COMPANY'S EXHIBIT

1. Conestoga, or emigrant wagon. 2. Model John Stevens locomotive, 1825, first in America. 3. Model Stockton and Darlington locomotive No. 1, brought from England to America in 1825. 4. Rack rail locomotive with cog gearing built for Madison and Indianapolis R. R. Co. 5. Locomotive "Lancaster," with stage cars; first steam train to run on Pennsylvania state railroad, 1834. 6. "George Washington," 1835; first locomotive to climb a heavy grade. 7. "Herald," Baltimore and Susquehanna railroad,



art, the results achieved by this organization, in which were consolidated, between 1846 and 1892 the interests of more than 200 corporations. At either side of the main entrance-way are depicted on panels in relief primitive and modern methods of travel and transportation for periods extending from 1492 to 1892. There are relief maps of termini and of the company's former and present lines, with relief models of Horse Shoe curve, and of cars, locomotives, and canal-boats. A perspective map, 33 feet long, shows the exact location of every train in its system at six o'clock in the evening of Columbus day, the 21st of October 1892. A chart explains some of the workings of the organization, and impressions from seals the gradual accretion of its corporate interests.

Among the models, most of them about one tenth of the actual size, are a stage coach that ran between Pittsburg and Philadelphia nearly 70 years ago, and a Conestoga wagon such as was used before the railroad



BUILDING OF PENNSYLVANIA RAILROAD COMPANY

era for eastward travel and transport to the Ohio and Mississippi valleys. Of locomotives there are among others models of the one which John Stevens built at Hoboken in 1825, and of the Stockton and Darlington engine *No. 1*, imported from England in 1826 by William Strickland, and loaned for the occasion by the Franklin institute of Philadelphia. There is the historic *John Bull*, its model made from the original drawings sent with the engine from Stephenson's works. After making the trip from New York to Chicago in somewhat less than a week, the engine itself with its two old-fashioned cars was installed in the yards at the terminal station near the Administration building, thus reproducing the first train drawn by a locomotive in New Jersey,



THE OLD "JOHN BULL" ENGINE AND TRAIN

the date being the 12th of November, 1831. There is also a rack-rail locomotive constructed for the Madison and Indianapolis railroad, near which are the *Herald*, which did service on the Baltimore and Susquehanna road in 1831, and the *George Washington*, built in 1835, the first to ascend a heavy grade.



Among the models of passenger and freight cars are two stage-body coaches, originally drawn by horse power, and which, with the engine *Lancaster*, formed the first train run on the Pennsylvania State railroad in 1834. There is one that plied in the same year between the business quarter of Philadelphia and the ferry across the Schuylkill river. To this date also belongs the first car with shingled gable roof, and with straight-backed seats, in which none but a quaker could sit. Of freight cars there is one which did service in 1836, and there is a baggage car built in 1849, the baggage being placed in wheeled crates and carried across ferries without removal.

Finally, there are the original cars, built specially for the purpose, by which the Krupp guns were hauled to Jackson park, with models of the guns upon them.

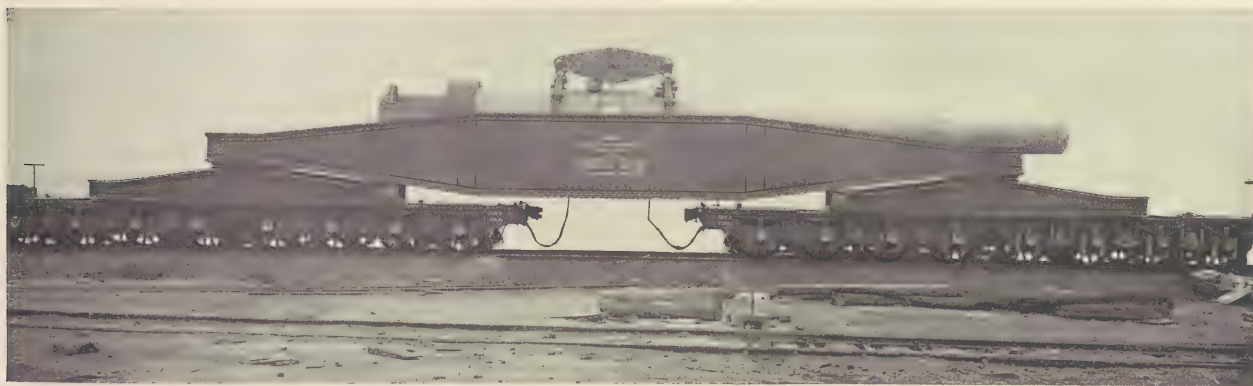
Safety appliances are shown, with train-signals, lanterns, and color-blind tests. There are lay figures of trainmen, conductors, brakemen, and other employes in uniform. There are models of tracks laid between 1831 and 1857.



MODELS OF "JOHN BULL" AND KRUPP GUN

There are tug-boats, a ferry boat, lighter, and barge, whose achievements date from 1839 to 1892. There is hoisting machinery by which a 3,000 ton vessel can be loaded in four hours, and there is a model of the first railroad bridge constructed in Pennsylvania, with spans of timber nearly 1,000 feet in length.

In cases and frames is a large museum of railroad relics and curiosities, including more than 1,000 specimens. Among them are rails and chairs laid in 1833; the whistle used by a driver on the old state road in 1832, when cars were run by horse-power; an old copper penny that helped to purchase the first ticket sold in the same year by the Camden and Amboy railroad; the ticket punch which a conductor used in 1849; a baggage check of similar date; a conductor's badge and tariff book of 1853, and the first guide book published by the Pennsylvania railroad in 1855. There are the wood-burning stoves used in passenger cars, the old fashioned signal lanterns, and the bells which for nearly half a century announced the arrival and departure of trains and steamers. Railroad literature is freely displayed, with reports, regulations, pamphlets, instructions,



CARS USED FOR TRANSPORTATION OF KRUPP GUN

pay-rolls, schedules, train-orders, way-bills, and advertisements, among the last a poster of 1792, advertising the "New Line Industry" by stage and sail boat from Paules Hook, now Jersey City, to Philadelphia. A so-called blank African ticket, issued in 1861, guarantees "that the person of color mentioned below is free, or is the slave of the party designated, and he has the permission of the said owner or owners to travel in the cars."

A collection of old views on Pennsylvania lines dates from 1832 to 1892. Among them is shown the wooden bridge built over the Schuylkill river in 1804, and used by vehicles, foot passengers, and later by railroads until its destruction by fire in 1875. On the Old Portage railroad is a train of freight cars being drawn up an incline by cable, behind it a "buck" or safety car, and at the summit an engine house and hitching shed. A stage coach is changing horses at a Pennsylvania tavern in 1825, and here again are *John Bull*, and the old



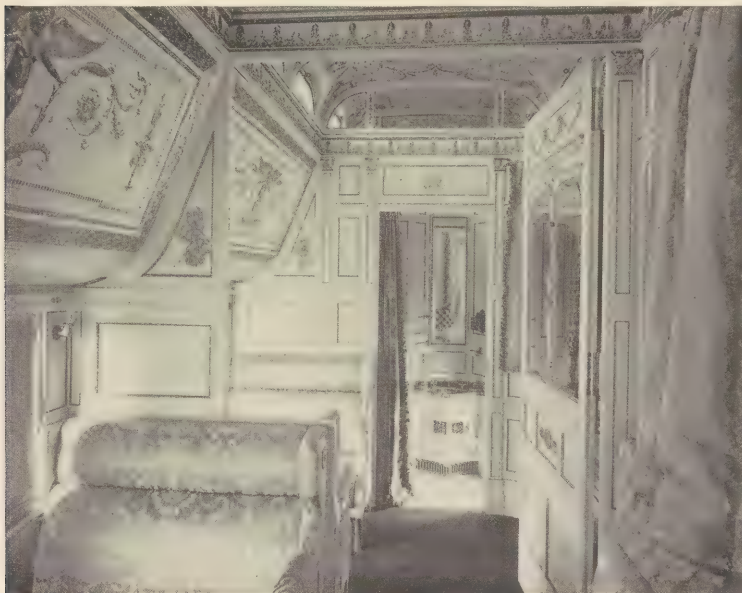


THE WAR ENGINE "GENERAL"

exhibits the first locomotive built for its line in 1858, and Providence, modelled after the stage coaches of the time, hung on braces, and resting on a four-wheel truck. In contrast with it is one of the last engines and passenger cars constructed for the company.

By other railroad companies historic engines have been placed on exposition, the Illinois Central for instance installing near the exhibit of the Pennsylvania company the *Mississippi*, built in England in 1836 for the Natchez and Mississippi line, now incorporated with its system. After doing service on several lines, in 1868 it was carried away by a flood, and after lying buried for ten years under a mass of debris was exhumed and repaired for further service. It is an odd-looking relic, and has been aptly compared to a boy's penknife which has several times been fitted with new blades and handle. On timbers beside it are specimens of the strap rails used on the Natchez and Hamburg line, on which this locomotive ran between 1836 and 1838.

Near the German section, in the north of the annex, the Chicago and North Western has on exhibition the *Pioneer*, so named as the first engine used on a Chicago road, one shipped by way of the lakes nearly half a century ago, when no railroad ran eastward from the midcontinent metropolis. Built in Philadelphia, in 1836, for the Utica and Schenectady line, a few years later it was purchased for the Galena and Chicago Union railway, then in course of construction. Here also is one of the quaintest of specimens, its smoke stack towering above the diminutive boiler and cylinders, with a single pair of driving wheels, and all its apparatus of most primitive pattern. Still another historic locomotive is the *General*, exhibited by the Nashville Chattanooga and St Louis railroad, by whose manager it was rescued from a limbo of refuse not far from the spot where it was captured by a band of confederate raiders in April 1862. Of this incident the story is briefly told under the heading of World's Fair Miscellany.



SLEEPING CAR IN WHITE AND GOLD

fashioned Conestoga wagons, with coaches, canal boats, and packets. There are locomotives of many patterns and dates, and the letters patent signed by Andrew Jackson and Martin Van Buren in 1831, granting exclusive rights for "a new and useful improvement in locomotive carriages and rails adapted thereto." The railroad riots at Pittsburgh in 1877 are depicted in graphic art, as also is the devastation wrought by the Johnstown flood in 1889. In drawings, photographs, and other forms are illustrated engineering work, construction, and maintenance, with bridges of iron, wood, and stone; stations, tunnels, cuts, canals, and floating equipment. In addition to this elaborate display the company occupies a small section in the annex of the Transportation building, where are passenger, refrigerator, and inspection cars of improved and recent pattern.

In an adjacent section the Old Colony railroad and a passenger coach that ran in 1835 between Boston



BUFFET AND LIBRARY NEW YORK CENTRAL TRAIN

and a passenger coach that ran in 1835 between Boston

Of modern specimens displayed in the American sections of the Transportation department, aside from those already



mentioned, the largest collection is from the Baldwin Locomotive works at Philadelphia, consisting of fifteen engines adapted to all varieties of service, including broad and narrow gauge, simple expansion, and compound locomotives, with such as are used on mines and plantations. The Brooks Locomotive works of Dunkirk, the Schenectady and the Pittsburg works, are also well represented, the Schenectady works having one of the largest engines in the annex. The Cooke Locomotive and Machine company, of Paterson, New Jersey, sends a freight and a passenger engine; from Lima works in Ohio come a logging engine and car; the Rhode Island works at Providence, and the Rogers works at Paterson, New Jersey, have each three engines on exhibition, and from the Richmond works is a locomotive of finished workmanship. Finally, the H. K. Porter and company's works at Pittsburg show some of the smallest engines used for special purposes, but equipped with all modern appliances.

Among foreign participants Great Britain occupies a prominent section in the annex, facing that of the Baltimore and Ohio railroad. Though somewhat limited, the display is of historic as well as of practical interest,



PAVILION OF NEW YORK CENTRAL RAILROAD COMPANY

for England is the mother of railroads, and by her have been furnished, almost from Stephenson's days, the types for many European systems. Here one may study a full-sized model of the *Rocket*, which on a September day of 1825 dragged between Stockton and Darlington a heterogeneous procession of vehicles, from a hucksters' wagon to a family coach. As all the world knows, it was driven by the Scotch engineer who, beginning life as a cowherd and at eighteen unable to read or write, gave to the world an invention which revolutionized its commercial and industrial conditions. Though conveying passengers from Stockton to Darlington at the rate of one shilling a head, the line was mainly used for carrying minerals and merchandise, at once reducing the freight on the former by more than 70 per cent, and on the latter by 90 per cent. Such was a foretaste of the great work which railroads were destined to accomplish.

On the completion of the Liverpool and Manchester line in 1829, it became apparent that ere long a transformation would be wrought in methods of travel and transport. Others followed, slowly at first, and then in more rapid succession, so that before the middle of the century the foundation had been laid of all the great trunk lines interlacing the British isles. In 1853 there were nearly 8,000 miles in operation; in 1873 this



mileage had been doubled, and at the close of 1893 more than 20,000 miles were open, railroad construction having almost reached its limit as it would seem, for there were few more lines to build, or few that would pay to build. The entire capital invested in these enterprises is not far short of \$5,000,000,000, the gross revenue from which exceeds \$400,000,000, or at the rate of \$20,000 a mile, while in the United States, though with nearly thrice the total of earnings, the average is less than \$8,000 a mile.

A feature in British as compared with American railroads is their enormous cost, amounting with less than one eighth of the mileage to more than one half of the outlay incurred by the latter. This is due in part to the substantial character of English road-beds, but more to the expenditure for right of way, much of it passing through towns and cities, or thickly populated regions, and purchased at fabulous prices. The Metropolitan railway, for instance, built partially underground, cost at the rate of \$2,500,000 a mile, and the North London, constructed mainly on arches, \$1,635,000 a mile. Yet both these lines are paying properties, the latter requiring nearly 1,000 passenger coaches and several hundred freight cars for its dozen miles of track. In the United States railroads have been built within recent years at a cost of \$15,000 a mile, while for the most expensive sections of the Central Pacific, over and through the Sierra Nevada, the outlay was not more than \$150,000 a mile. Nevertheless, as an investment, British railways pay better than our own, averaging about five per cent on ordinary stock against less than two per cent in the United States. Another contrast is in the proportion of employes, with twenty men to each mile of British road against five in the United States. To the insufficiency of their working force is mainly due the large number of casualties on American lines, amounting to nearly 10,000 a year, more men being killed in 1893 than met their fate in the federal ranks during the three days' struggle at Gettysburg.

In the *Queen Empress* with its train of cars, exhibited by the London and North Western company, we have the most perfect types of rolling stock developed by British ingenuity. While there are larger and more



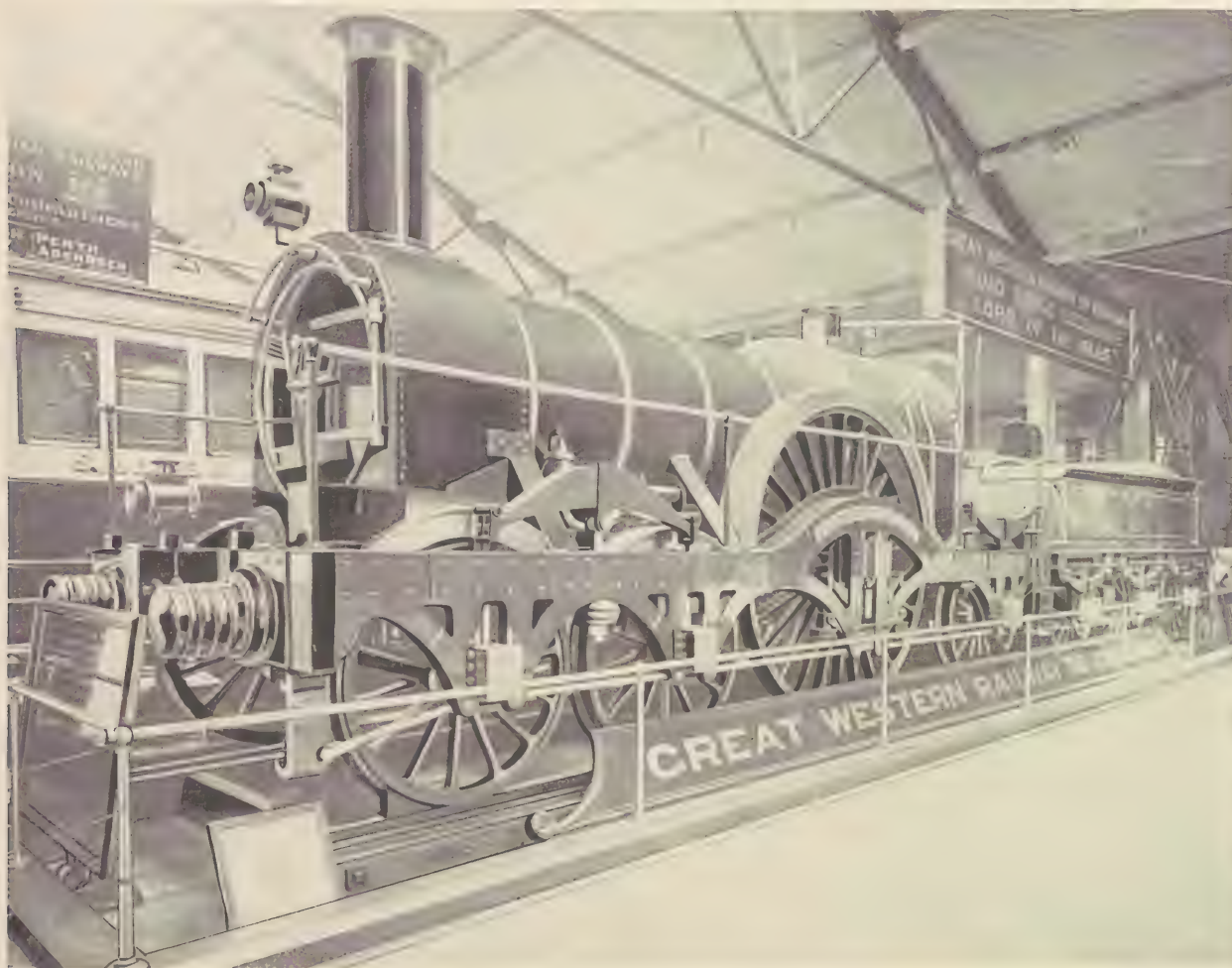
THE FAMOUS ENGLISH LOCOMOTIVE, "QUEEN EMPRESS"

powerful locomotives in the American section, there are none of more handsome appearance and more elaborate finish. Not only are the iron and steel polished to a mirror-like brightness, but the painted portions resemble the finest cabinet work, even the pipes of the smoke box being varnished, while the tube plate is of snowy whiteness. The engine itself is of a blue color, with stripes of red and edgings of green. Its weight is about 52 tons, and a novelty in its construction is that the high-pressure cylinders are placed in front of the forward driving wheels, with corresponding length of piston rods. There are more than 150 boiler tubes, with a total heating surface of some 1,350 square feet, and a steam pressure of 175 pounds to the inch.

The sleeping car contrasts somewhat sharply with those of American build, affording almost the privacy of a home, with broad, cushioned seat provided with arm rests and baggage rack for every passenger, the sleeping berths with wardrobes underneath, and each with separate lavatory and electric communication. In the centre of the car, and connected by a side aisle with either end, is a smoking room, finished in walnut and



satin wood, with easy chairs and folding tables. The composite car contains first, second, and third class compartments, the principal difference being as to finish, for all are well upholstered and comfortably furnished. Among other exhibits by the London and North Western are models, signal apparatus, and scenic views along



MAMMOTH LOCOMOTIVE OF THE GREAT WESTERN RAILWAY, ENGLAND

its line of route, the first including reproductions of the *Rocket*, and of a Trevithick engine, the first to run on a tramway between Merthyr and Cardiff, some ninety years ago.

The Great Western Railway company has on exhibition the *Lord of the Isles*, built for broad gauge lines, and partly to show their superiority over those of narrow gauge. This is a type of the first express engine ever constructed, others having been used for nearly half a century, and then retired only on account of a change in the standard gauge. From this company are specimens of the track used many years ago, one



THE CANADIAN PACIFIC ENGINE, "626"

of the rails weighing only 62 pounds to the yard, but laid on longitudinal sleepers and with continuous supports, enabling it to carry as much weight as the modern rail by which it was superseded, mainly because of the lower price of iron, and the higher cost of timber. There are also photographic views and portraits, among them



one of Brunel, the artificer of the *Great Eastern*, and in 1825 resident engineer of the Thames tunnel.

By the London firm of Westwood and Winby is exhibited the locomotive *James Toleman*, built for handling fast and heavy trains. In the mechanism of this engine there are special contrivances for combining speed and power, the driving wheels for instance having separate cylinders, with long piston rod for the transmission of power. The boiler is of unusual size, with a total heating surface, including fire box, of 2,000 square feet, and narrow enough in horizontal diameter to be placed between the driving wheels. The bearings are large, the connections strong, and the entire engine is a handsome specimen of workmanship, but with a complication of parts that must render difficult the task of keeping it in order. From Sir John Fowler and Sir Benjamin Baker are fine models of the bridge across the Forth, and from other companies are models and photographs of rolling stock, buildings, equipments, and the scenery along their lines of route.

Side by side with the exhibition train of the London and North Western is a full standard train of the Canadian Pacific railway, built at its works in Montreal, and showing the actual service of the company, with



GENERAL VIEW JACKSON PARK

the accommodation furnished to passengers. At its head is a compound engine weighing 106 tons, with steel boiler carrying a pressure of 180 pounds to the inch. As with most of the steam leviathans housed in the annex, it is plainly finished, and of sombre hue, the tender painted black, with red facing and gold bordered panel. The baggage car is of the usual type adopted by the company, strong and solid, as are all the rest. Next to it is a second class sleeper, with leather covered seats arranged at night as berths as on the Pullman cars. Then comes a first class day coach, upholstered in wine-colored plush, and finished in Honduras mahogany, elaborately carved and with tasteful panellings. Arches resting on columns divide the car into sections without obstructing the view, and give to it a massive appearance. At either end is a smoking room, of which only the one in rear of the car is used when the train is running.

In the dining car, whose floor is heavily carpeted, are ten tables, with carved bronze alcoves, their seats covered with morocco leather, and with a rounded pillar at the back and end of each. The sideboard is an elaborate piece of furniture, rounded at the base, with plate glass panels, its handsomely carved octagonal top resting on massive columns. The last car is a first class sleeper, with ornate and elegant finish, its main body divided into eight sections, and at one end are state rooms with linings and curtains of richly flowered silk, connected with which is a toilet room with plate glass mirrors. The cars can be lighted either by gas or electricity, and are heated by steam from the engine. In maps is described the company's route around the world, and in graphic art is reproduced some of the finest scenery on this the most picturesque of American



railroad lines. From the bureau of public roads are also maps and photographs of road ways, bridges, and tunnels, and from private exhibitors collections of railway supplies.

Adjoining the British section on the northwest, New South Wales has condensed much that is of interest within a limited space. The hansom cabs, with their ingenious sliding doors, are specimens of excellent workmanship, and a collection of photographs gives the stranger to Australian enterprise a most favorable impression of the railway stations of Sydney, Albury, Newcastle, and other centres of the system, as well as of its bridges and rolling stock. A large model of the Zigzag railway shows the line winding around and climbing the sides of the Blue mountains, one of the remarkable engineering feats of modern times. Near by are models of the steamships *Austral* and *Glasgow*, and in the far end of the section are reproduced the Sutherland dry docks at Sydney, among the most extensive in the world. At the other side of the annex is a large pile of railway sleepers, made of iron bark wood, many of which have done service for nearly a quarter of a century.

Germany occupies a liberal space at the southern end of the annex, where are well represented the railway interests of the empire. The first of the German lines was completed in 1835, and of Prussian lines in



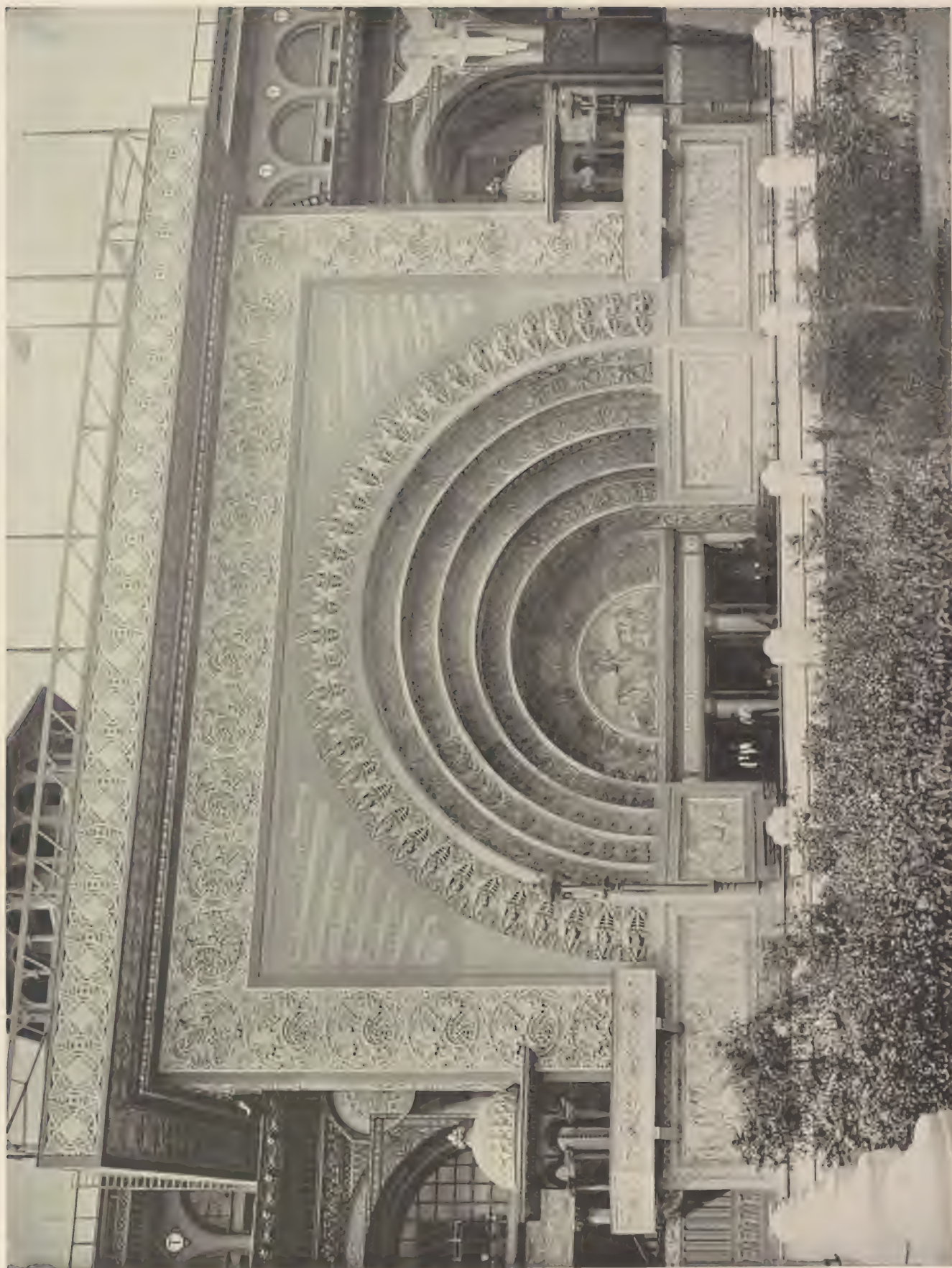
FRENCH AND BELGIAN LOCOMOTIVES

1839; but while the Prussian government encouraged railway development, and a decade later undertook the construction of railways of its own, it was not until recent years that her system was fully developed. In 1879 was authorized the purchase of private lines by the state, which in 1885 owned nearly all of the 14,000 miles of roadway. In 1892 there was double that mileage in operation, with 14,300 locomotives, 27,000 passenger, and 300,000 freight and baggage cars, the total earnings amounting to \$480,000,000, and the net earnings to 43 per cent of that sum; but in which, as in other countries, fixed charges as interest on bonds are not included.

First among the German exhibits may be mentioned that of the Royal Prussian state railway administration, at Berlin, consisting mainly of locomotives and passenger and freight cars manufactured in the principal railroad works of the empire. The first include a compound freight engine and tender from the Elbing shops of F. Schichau, and a locomotive with five-ton axle pressure from Henschel and son of Cassel. Among the rolling stock are three and four truck railway carriages, and a coal car with iron body, the last from a Cologne-Deutz firm.

By Siemens and Halske of Berlin and Chicago are displayed all kinds of apparatus used for signalling, and for the operation and interlocking of railroad switches. Among them are two illustrations of their electro-manual system of block signalling, one adapted to German and the other to American lines, the principal features being the same in each, as with other apparatus, some of which has been in continuous service for many years. All the signals are controlled by the same instrument, and by an ingenious contrivance the electric circuit is connected with each of the rails, preventing the operator from unlocking the signal to the rear,



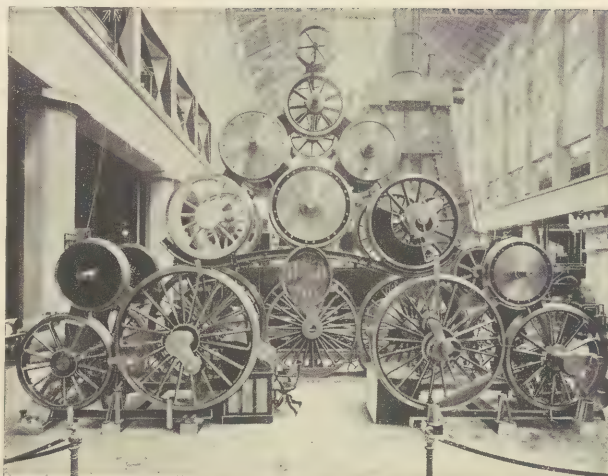


THE GOLDEN DOOR, TRANSPORTATION BUILDING



and thus avoiding a source of danger in manual block systems. And so with the track signal, which can be placed at any distance in advance of the signal tower, and has doubtless prevented many a collision. The same company exhibits an electric automatic system of block signals, and in Machinery hall has one of the most elaborate collections in the German department.

From the museum of Permanent Way, at Osnabrück, is a collection gathered from every quarter of the world, showing the roadways of many nations and periods, arranged chronologically and in groups. First is a specimen of the plank road named by Tacitus *Pontes longi*, laid by Domitius about the year five B.C., as a portion of a Roman military road across a swamp near Osnabrück, and excavated in 1892 from its dense overgrowth of moss. Next is a wooden tramway, such as is still used in remote and sparsely settled regions. Then there are exhibits of stone, wood, and iron sleepers and rails, either as originals or reproductions, from the track on which Richard Trevithick experimented in 1804 to that which was laid in 1890 for Prussian state railways. There are self-bearing rails without sleepers and joltless permanent way of various kinds, operated at small expense, with other appliances for comfort and safety, illustrating many phases of construction both as to economy and technique.



TROPHY OF FRENCH CAR WHEELS



WOODEN TRAMWAY AND FIRST SWITCH. USED IN HUNGARY. FROM OSNABRÜCK MUSEUM, GERMANY

half the cost of the earlier lines constructed, equipped, and worked by private enterprise. In the larger corporations were for the most part absorbed the local roads afterward built under government patronage, and in 1884 a contract was made with the six great companies for 7,000 miles of roadway in addition to the 17,000 miles then in operation, to be built at their own expense and the money ultimately refunded by the state, which meanwhile guaranteed a fair dividend to stockholders. These were not all completed, as it would seem, in 1891, when the total length of track was somewhat less than 20,000 miles. From all French railways the revenue for that year was stated at about \$230,000,000, of which nearly one half was net income; for in France railroads are managed with the closest economy.

In the French section, adjoining the main portal of Transportation hall, there are no such monster locomotives as are exhibited in the American and British departments. Of the four engines the average weight does not exceed 45 tons, and the average cost about \$15,000. Of rolling stock the only specimen is a neat, second class coach, used for local and suburban traffic, with seats across the body of

In a superbly executed model is reproduced the railway station at Cologne, one of the finest specimens of railroad architecture in the world, 80 feet high, and with a central span of more than 200 feet. Near the northern portal of the Transportation building are sets of wheels for locomotives and cars, pressed castings and welded iron plates, with models of public and other works constructed by a Bergbau company, which, as it states, employs 7,600 men in the production of 250,000 tons a year of manufactured iron and steel.

In France railroad development has been largely aided by the state, which furnished one-

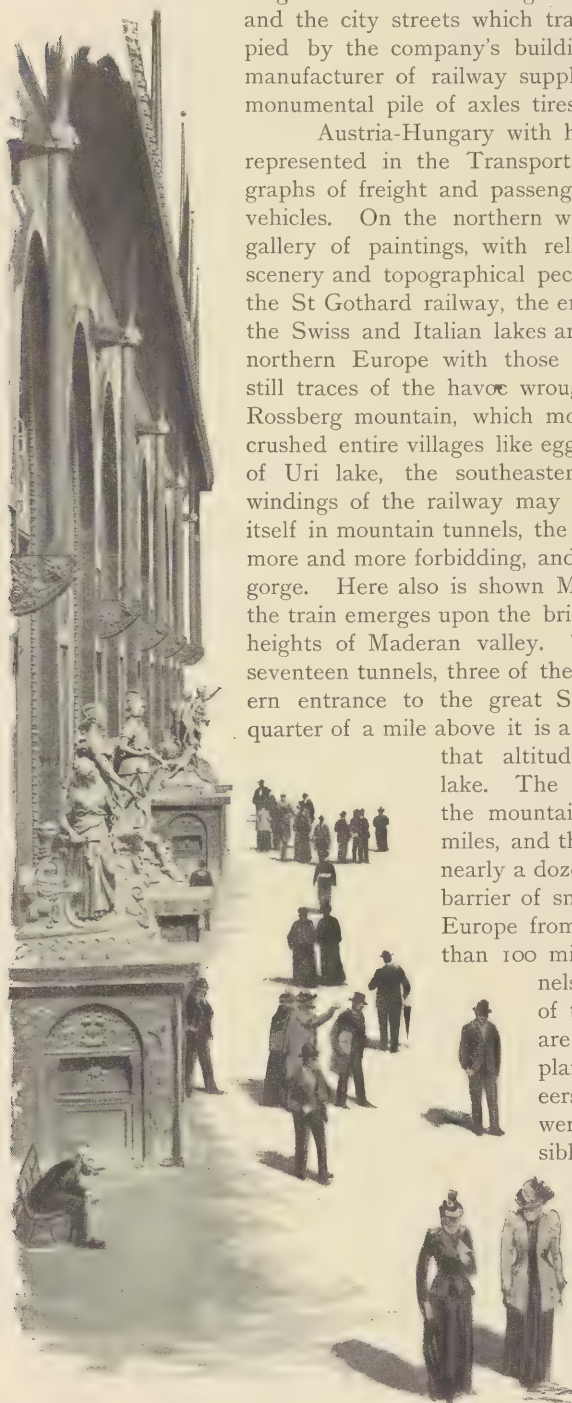


CORNER OF MEXICAN CENTRAL RAILROAD PAVILION



the car and a stairway leading to the roof. The Northern and Western railways of France have special sections in which the extent of their systems is explained, as also their facilities for handling freight and passenger traffic. The latter has a model of the St Lazare station at Paris, showing the passenger depot, the long train sheds and freight houses, the depressed tracks, and the city streets which traverse the area partially occupied by the company's buildings and lines. Elsewhere a manufacturer of railway supplies advertises his wares in a monumental pile of axles tires and wheels.

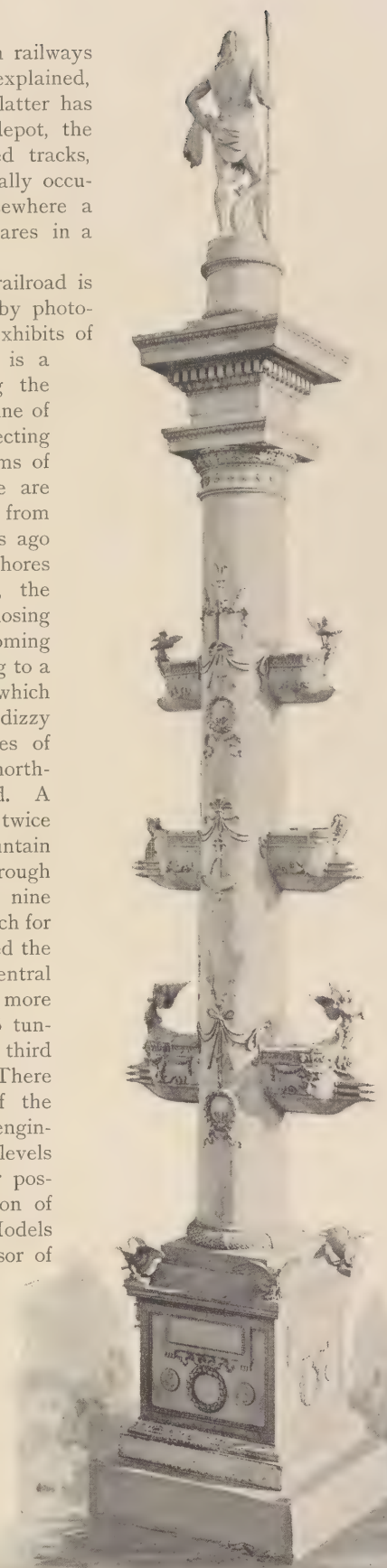
Austria-Hungary with her 17,000 miles of railroad is represented in the Transportation building only by photographs of freight and passenger cars, and a few exhibits of vehicles. On the northern walls of this building is a gallery of paintings, with relief maps illustrating the scenery and topographical peculiarities along the line of the St Gothard railway, the engineering link connecting the Swiss and Italian lakes and the railway systems of northern Europe with those of the south. Here are still traces of the havoc wrought by the landslide from Rossberg mountain, which more than eighty years ago crushed entire villages like egg shells. Along the shores of Uri lake, the southeasterly arm of Lucerne, the windings of the railway may be partially traced, losing itself in mountain tunnels, the rocks and peaks becoming more and more forbidding, and the valley narrowing to a gorge. Here also is shown Mount Bristen, from which the train emerges upon the bridge which spans the dizzy heights of Maderan valley. Then follows a series of seventeen tunnels, three of them circular, and the northern entrance to the great St Gothard is reached. A quarter of a mile above it is a little village, and at twice that altitude, a miniature mountain lake. The main tunnel runs through the mountains for a distance of nine miles, and the entire railway, which for nearly a dozen years has traversed the barrier of snow peaks dividing central Europe from northern Italy, is more than 100 miles in length, the 56 tunnels covering about one third of the total distance. There are also illustrations of the plans adopted by the engineers, showing how valley levels were followed, wherever possible, in the construction of the great work. Models made by a professor of the Federal polytechnic at Zurich are works of art in themselves, the ideas of relative depression and elevation being conveyed in gradations of color as well as in form, blue for the valleys, and orange for the hills and mountains.



BESIDE AN OUTER WALL

elevation being conveyed in gradations of color as well as in form, blue for the valleys, and orange for the hills and mountains.

Entering the Mexican section near the United States exhibit of vehicles, we are confronted with the typical horseman of our sister republic, with wide sombrero and mounted on a profusely caparisoned steed. Near by are specimens of saddlery and wagon



ROSTRAL COLUMN, SURMOUNTED BY STATUE OF NEPTUNE



work, both of skilful execution. In one of the corners is a replica of the so-called stone sails near the summit of the hill of Guadalupe, in the neighborhood of which stands the temple of Our Lady of Guadalupe, whither, as the legend runs, a party of shipwrecked sailors, in fulfilment of a vow, bore the foremast of their ship,



EXHIBIT OF MODEL TICKET OFFICE

and other agents and agencies of transportation, with objects that have no connection therewith, as the kitchen of a peon's home, a convivial lover embracing his sweetheart, and a drunken husband arraigned before a Mexican justice.

Southeast of the central court is a large area in which our manufacturers display the multitude of articles classified as railway supplies, the range varying from such as are required for a passenger coach to the outfit of a railroad depot. From various establishments are such specialties as seats of wood, rattan, and metal for cars and stations, with folding beds, ceilings, panels, ornamental trimmings, and lighting apparatus. Of the two last there is a creditable display by the Adams and Westlake company, of Chicago, in a handsome pavilion whose decorations are mainly composed of the bronze, brass, and white metal trimmings now largely used for cars of elaborate workmanship. There is also a complete collection of headlights, signal lamps, and lanterns. Near by is the large model of the city of Pullman, mentioned in connection with the railroad exhibit of the Palace Car company, and adjoining this the publishing firm of Rand, McNally and company has a specimen ticket office, which is a bureau of information as well as an advertisement of the special classes of goods that the house supplies, as railway maps, tickets, punches, cases, and baggage checks. Upon the outer wall of this structure, which is shared with the Pullman company, is a large map of the United States, showing its complicated railway systems, and beside it the electrotpe from which it was printed.



DISPLAY OF RAILWAY AIR BRAKES

In the section devoted to railway supplies, several bridge companies exhibit models and drawings of the structures which they have built, among them being a reproduction of the bridge thrown across the Mississippi

planting the transformed emblem of their devotion where now it stands. Of this curiosity there is an exact reproduction by the Mexican National railroad, except that it is some twenty feet lower than the original. The company's office is decorated with ancient pottery, casts of Mexican gods, and figures exhumed from the sculptured ruins of Aztec and Toltec civilizations. The Mexican Central has its headquarters in another corner of the section, and in a separate chamber, in the form of a miniature museum, shows in maps its lines of route. Along the walls are tiny painted figures of water-carriers,



river at the city of Memphis, the only one below the mouth of the Ohio river. Opposite is a finely constructed model of the bridge over the firth of Forth, the pride of British engineers. In the western gallery a prominent engineer traces in a series of drawings the evolution of the American bridge.



THE PIONEER CABLE TRAIN

Under the group of railway supplies are classed the exhibits of air brakes of the many patterns now in use. The largest collection is that of the Westinghouse Air Brake company, which has a brilliantly lighted pavilion and a liberal space in which to display in working order its numerous specimens. It has also a train of cars, supplied with the latest apparatus, and furnished with compressed air pumped from Machinery hall, that the brakes may be seen in actual operation. Several companies have special apparatus for heating and lighting cars, the entire side of a long aisle in the annex being occupied with this class of exhibits. Two New York establishments make the most extensive showing, one of them illustrating

not only its specialties for heating by steam but what is known as the Pintsch method of lighting by gas.

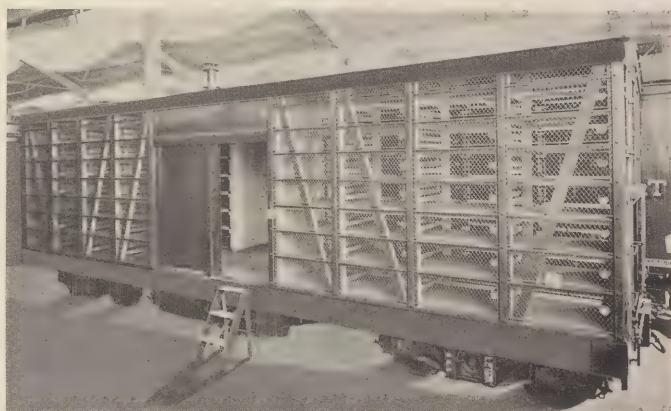
Among the miscellaneous features of the railroad exhibit there are few more attractive than that of snow ploughs. Of these there are several specimens within and outside the annex, the most noteworthy being the rotary snow plow used by the Atchison Topeka and Santa Fé company. It consists of a ponderous engine, with huge automatic reversible knives and hollow cone-shaped scoops; and one may well believe that the heaviest snow-drifts in the cañons of the Rocky mountains cannot long resist its onslaught. It has been thoroughly tested, and in a collection of photographs the plough is shown battling its way at various points through towering masses of snow.

Bicycle electric cars are among the new inventions exhibited in the railroad department. In some of them the wheel is so large as to protrude through the roof of the car; in others there is a smaller central and vertical wheel, with two which run horizontally upon side tracks.

The efforts to avoid friction, both of atmosphere and rail, are illustrated by several mechanisms. One of the devices is a cigar-shaped car; and there are at least two electric railways over which it is proposed to run

trains suspended from the rails, rather than resting upon them. Through one of the contrivances it is claimed that a speed may safely be developed of 200 miles an hour, the central idea being the action of a bevelled drive wheel against a bevelled rail. On the top of the supporting trusses is a steel trough, sloping upward and outward from the centre, in which travel the truck and anti-friction wheels whence the car is suspended. The invention has been tested on a small scale, and even with imperfect roadway and electric motor it is said that a speed of over 40 miles an hour has been attained.

Although the exhibits of railroads proper completely dwarf those of the street car and minor lines, much is to be seen and learned by an examination of the latter groups; for here are displayed the latest patents in seats, stoves, wheels, switches, and all other appliances. Electric motors and the furnishings of electric cars are largely represented, together with all kinds of cable systems. In the latter direction San Francisco is prominent, A. S. Haliddie of that city, the inventor and builder of the first cable road, producing the original dummy used on a steep hill grade in August, 1873.



FOR TRANSPORTING LIVE POULTRY



AN INSPECTOR'S STEAM HAND CAR



In a section of the roadway are also revealed the workings of the grip and pulleys, and adjoining is a collection of grips used by various cable lines throughout the country, showing difference in style and mechanism. A California company, which manufactures wire cables, has a patent rope-way in operation, one devised for the transportation of ore over the mountains, and a Chicago establishment exhibits a motor operated by liquid ammonia supplied by stationary plants.

In the division of vehicles are included all the parts of which they are composed, and all appliances used for animals employed in travel and transportation, together with everything that tends to illustrate the development of this branch of locomotion from remote ages and from distant lands. First let us pass in review the collective exhibits



SPECIMEN CARRIAGE EXHIBIT

of the United States and Great Britain, with the historical specimens scattered among their sections, for here is the largest and choicest assortment of materials, far exceeding in interest those of other participating nations.

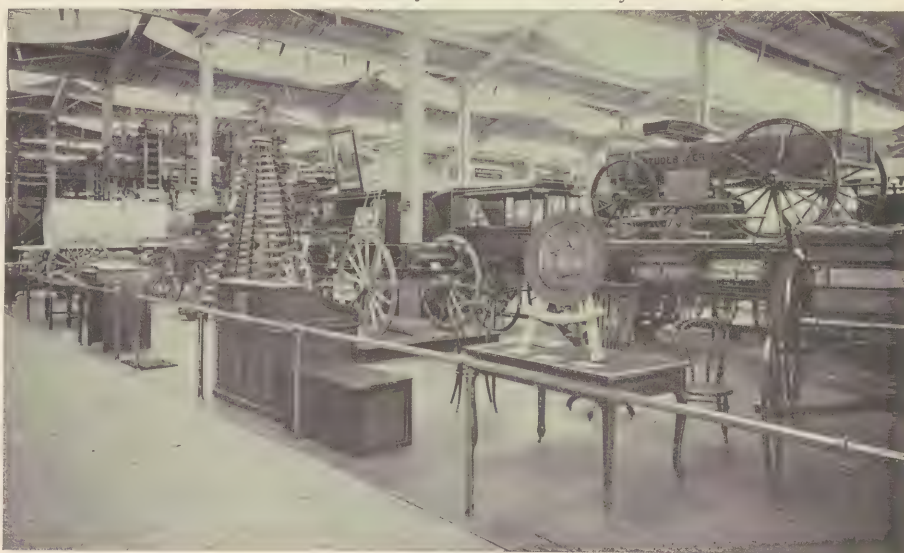
Nearly three acres of floor space in the northern portions of the main building and annex are occupied by vehicles exhibited by manufacturers in the United States. Generally speaking, light pleasure carriages, as pony carts, surreys, phaetons, rockaways, and coupés, with speeding wagons, sulkies, and trotting sleighs are found in the main hall, and in the annex are grouped the rougher and more cumbersome specimens, as trucks, farm and lumber wagons, street sprinklers, and such as are used by beer, coal, express, and ice companies. In the latter are also the delivery wagons of the grocer and dry-goods merchant, wheelbarrows, hand-carts, garbage and milk wagons, and various devices for dumping heavy loads.

In each of these sections, whose dividing lines are not distinctly drawn, are costly hearses, noticeable alike



SAMPLE OF STREET SPRINKLER

for artistic design and finished workmanship. A so-called state hearse, made by the Crane and Breed manufacturing company, of Cincinnati, and covered with figures of cherubim and seraphim, was designed by a woman, and is valued at \$12,000. In another from the works of James Cunningham and son, of Rochester, is imitated the style of the Italian renaissance, with symmetrical dome, elaborately fashioned lamps, and body composed in part of bevelled glass, the highly polished portions relieved by those of more sombre finish. The same firm has also a



VIEWS IN THE CARRIAGE AND WAGON SECTION





A WAGON COLORED IN GOLD

have an elaborate display, ranging from a light speeding wagon and a finely carved victoria to a massive four-in-hand. The Columbus Buggy company, of Ohio, also demonstrates the pleasing effects which may be produced by factory work, and adds to the interest of the entire exhibit by contributing to the museum of curios a typical Mexican ox-cart, its body and wheels made of huge timbers, and the state carriage of President Polk, built at Yorktown, New York, half a century ago.

A dozen or more of vehicles, of various nations and times, are ranged along the eastern and northern walls of the section now being described. First comes the Mexican litera, a kind of sedan chair, but with handles fastened to mules instead of to men, used for the conveyance of women over mountain roads. Next are the colonial carriage of 1760, and one of somewhat later date, used by a substantial citizen of Wilmington, Delaware, close to which is the pert, light sulky in which Nancy Hanks broke the world's record. In contrast with this feather-weight

vehicle is the four-in-hand drag which flanks it, made by a London factory for the prince of Wales. Beyond is an antique Vermont sleigh of the last century, and a quaint wagon, more than 100 years old, in which rode Nancy Standish Wells, of Wetherell, Connecticut, a descendant of Captain Miles Standish. Almost touching the latter are the handles of a Japanese jinrikisha, and not far away the lumbering ox-cart of Mexico, the family coach of President Polk—its cushions falling to pieces and its veneering much the worse for wear—and the more modern carriage of Daniel Webster. In this vicinity also is the Spanish volante, with its single pair of cumbersome wheels, the horses driven neither tandem nor abreast, but in a fashion between the two.

Passing into the annex, where again the Studebaker company is represented, we find a large collection of farmers' wagons, especially from Wisconsin, Illinois, and Kentucky factories.

Columbian coach, its body decorated in various colors, with trimmings of black, orange, satin, and gold lace. A New York manufacturer shows a sleigh in the form of a delicately tinted shell, resting upon a bed of sea-weed supported on the back of four dolphins. The front of the sleigh is in the form of a sea dragon, the coloring throughout being harmonious and artistic. Nearly a score of carriage manufacturers at Amesbury, Massachusetts, present a large and varied collective exhibit, including many styles of buggies, wagonettes, phaetons, and rockaways, with a remarkably handsome specimen of a tally-ho coach. Studebaker brothers, whose factory is in South Bend, Indiana, and their salesrooms in Chicago,



WAGONS FOR THE CITY DEPARTMENT



SPECIMEN PONY CART



Among other specimens of artistic workmanship is an ice wagon from a Philadelphia company, with historic scenes depicted on its panels, and a piano van from the same city, its body divided into diamond-shaped sections and painted in tasteful coloring.

On the ground floor is a small but choice display of British vehicles and their accessories, the main interest centring in the collections of two London firms. One of them has an assortment of drags, victorias, mail-phætons, a rustic cart, and a canoe-shaped landau. In the state-coach used by the lord mayors of London, the other firm presents an attractive exhibit, as is shown by the crowds which surrounded it. The gold-fringed hammer cloth, the golden lamps, the body of blue bearing the royal crest, and the interior furnishings of heavy, blue damask, with trimmings of blue and gold, give to it the gorgeous and fantastic appearance, which helps to make the lord mayor's show the laughing-stock of the British metropolis.

Canada has but a slender exhibit of vehicles in her section north of the British display; yet one that includes nearly every description of conveyance used on land or stream, from heavy farm wagons to light carriages and phætons, with carriage springs and hardware, bicycles, skates, and sleighs in many styles. Of the last there is an interesting collection, as might be expected from a country where for three months in the year sleighs are almost the only means of travel and transportation. Among them is a model of the sleigh presented by the women of Canada to the duke of York and the princess May. It is a beautiful specimen of workmanship, showing the skill developed by long experience in this branch of manufacture. Here also are sportsmen's canoes, folding boats, snow-shoes, toboggans, and other special articles adapted to this home of the sportsman, with photographs of tourist routes and pleasure resorts.

In the French section the Parisian manufacturers who are mainly represented have organized an exhibit remarkable for its variety of form and bright, artistic



COLLARS OF ALL SIZES AND STYLES



COLUMBIAN MILK WAGON

coloring. A double-decked omnibus, with massive enamelled iron guards around the steps, seems to combine comfort with safety, and near it is a \$1,100 coupé of graceful outlines and richly but simply decorated, with an electrical indicator recording the distance travelled. Almost beside it is a gilded sedan chair of the seventeenth century, adorned with cupids, clusters of fruit, and garlands of flowers, while not far away are mail-phætons of unique design, landaus, dog-carts, road coaches, silver-mounted harness and saddles, with other paraphernalia, all tastefully arranged, a life-like dummy occasionally giving animation to the scene. There is also a small collection of bicycles, the remainder of the exhibit relating to the



LIGHT ICE WAGON



MONUMENT OF WAGON HUBS





MACHINERY HALL AS SEEN FROM THE OBELISK COURT



railroad systems of France already described in this chapter.

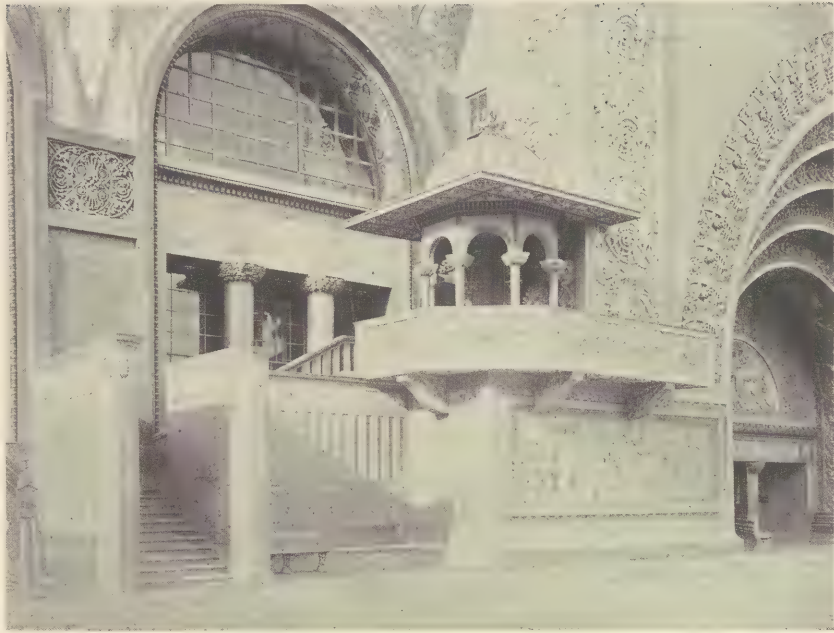
In the section devoted to vehicles Germany plays a modest part, her exhibit on the ground floor being confined to a small collection of bicycles and tricycles, a few carriages and wagons, registers for public cabs which record either time or distance travelled, and a carriage whose motive power is gas. Italy is but slightly represented in the Transportation department, her entire display consisting of a collection of cordage and whips, and a refrigerator car from a Milanese firm.

Droskies and sleighs of artistic design and elaborate finish, heavy robes, muffled outriders and drivers, are what the visitor expects to see in the Russian section; nor is he disappointed. Among the finest specimens is a large sleigh with rich ebony finish, the runners curving gracefully in front and the driver further protected from contact with his horses by a rampant figure of the king of beasts. This exhibit is by a Moscow firm, and another manufacturer from the same city displays the saddles and harness which have gained for him during the past forty years medals of bronze, silver and gold from the fairs of his own municipality and those of Philadelphia and New Orleans.

A structure of mediæval aspect now attracts the attention of the visitor, one that appears somewhat out of place in the Transportation building. Around it are patches of verdure, and a large mosaic of Columbus, set into the wall near the main entrance, adds to the incongruity of the exhibit. The Gothic arch which forms the doorway is approached by a short stair-case, and beyond, and within is the inscription, "The United Tyrolean Association for the attraction and guidance of tourists." This edifice is, in fact, a reproduction of a Tyrolean monastery of the middle ages, the figure of Columbus being the handiwork of native peasantry, who used in its construction pieces of opaque glass colored by burning. The alpine panorama presented to the visitor as he ascends the stairway is supposed to be viewed from the vestibule of the monastery. The canvas shows the grandeur of the Mittelberg glacier, and also the signs which direct the traveller to noted resorts scattered

throughout that region. Two small apartments at the side of the panorama further impart a religious aspect to the structure, containing as they do carved and painted figures of sacred personages, photographs of churches, and burnt etchings in wood in imitation of Raphael's work. Small alcoves are filled with articles made by the peasantry of the Tyrolean alps, including native costumes, and affording a gentle hint as to the real object of the exhibit are samples of the clothing best adapted to tourists whose path lies through these regions.

On one side of a screen in the Japanese section adjacent is a series of photographs depicting oriental modes of transportation. A leading rôle is played by the shah of Persia, with his state carriages and gorgeous



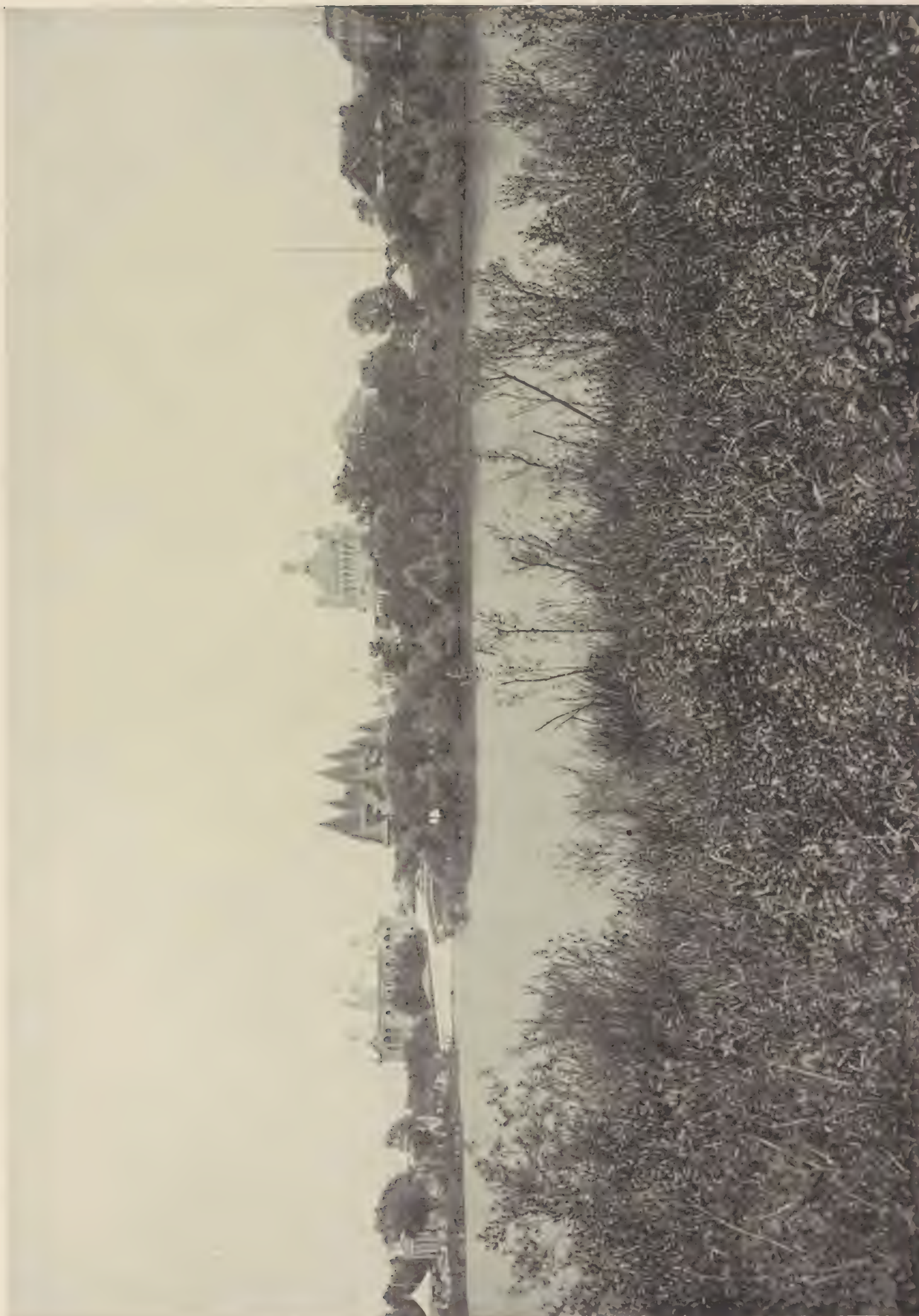
OUTER SECTION OF TRANSPORTATION BUILDING



CARRIAGE OF EX-PRESIDENT POLK

retinue. Opposite is a small space crowded with figures whose originals are found among the street carriers of Constantinople, this statement, however, not applying to the Turk, apparently bending double under the weight of a vast packing box consigned—so reads the custom house label—to the Columbian Exposition. The burdens





FISHERIES AND FOREIGN BUILDINGS FROM A DISTANCE





BIRDS-EYE VIEW OF GROUNDS

borne by the donkeys, the sedan carrier with his lady, the peddler with market basket on his back and tray of tins before him, and other typical characters, are more in keeping with the environment. Packs and harness for man and beast, with trappings and appliances of various kinds, are also within the scope of the exhibit.

In the Brazilian section, the old and new, the savage and civilized are strangely commingled, and the contrasts are rendered all the more striking from juxtaposition within a somewhat contracted area. Along one entire side is a canoe, more than fifty feet in length, fashioned from a large mahogany tree. A few feet away are a first-class passenger coach for local travel, and a roomy tramway car from Rio de Janeiro, with finely finished wood-work and reversible seats. Near an antique tricycle of the year 1850, the first one seen in Brazil, is the state carriage used by Dom Pedro in 1822. From the naval department of the republic are the great yards and docks at Rio, with models of engines, hoisting and other apparatus there employed. In a gaudy

Turkish carriage, between the exhibits of Brazil and Mexico, is one of the many instances where the most diverse of civilizations touch elbows in the Columbian Exposition.



CART FROM SURAT, BOMBAY

In the northern half of the gallery floor is a large assortment of bicycles and miscellaneous exhibits, and these I will describe beginning with the collection of Great Britain, which has here installed the greater part of an extensive display of vehicles. On a ledge of the gallery, in the midst of a museum of curios presently to be mentioned, stands an odd looking machine with wheels joined to a wooden backbone and handle. Upon it is a saddle, but the observer cannot detect the mechanism by which it was propelled, until in one of the quaint pictures which line

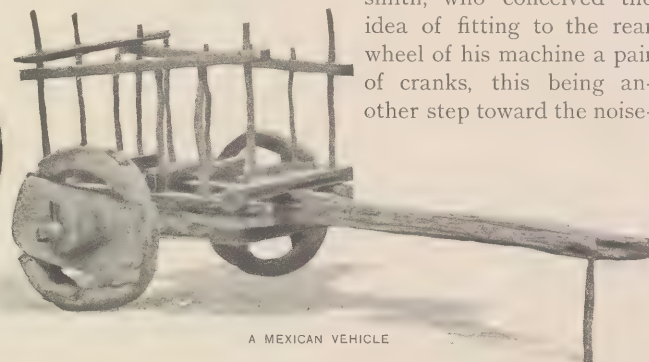


the walls he sees its counterpart. Astride of the latter is depicted, with his feet vigorously pawing the ground, the rider of the English hobby-horse, which, during its brief existence in the early portion of the present century, was mercilessly caricatured by the press. The specimen here presented is said to have been ridden by the first earl of Dunham in 1810. But aside from its comical appearance, this vehicle is of interest as the forerunner of the modern bicycle. Among those who mounted the dandy horse, otherwise called the pedestrian curricule, was a Scotch black-

smith, who conceived the idea of fitting to the rear wheel of his machine a pair of cranks, this being another step toward the noise-

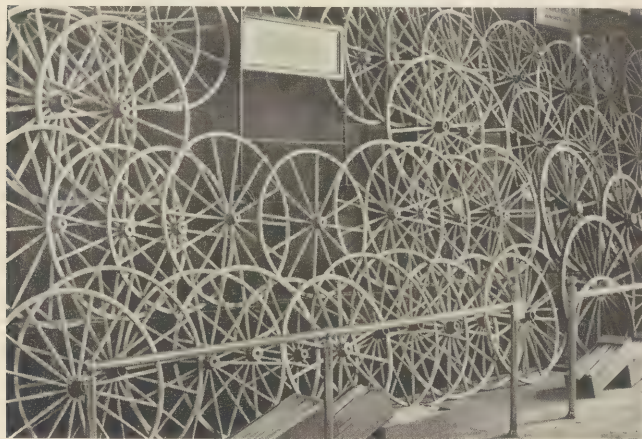


DANIEL WEBSTER'S COACH



A MEXICAN VEHICLE

less swift-moving machine of the present day. Tricycles and tandem bicycles it may here be observed, have never come into such general use as the trim, light, two-wheeled machine known as the safety—safe as compared with the high-wheeled pattern, and now furnished with pneumatic tires and trimmings of aluminium which help to reduce the weight.



AMERICAN CARRIAGE WHEELS

The British collection consists mainly of the bicycles best adapted to the excellent roads for which that country is famous. Here and there are a few tricycles, and several firms display such specialties as cold-drawn steel tubings, tires of peculiar make, and other parts of the machine; but as a rule the score of manufacturers who have organized this department confine themselves to the modern bicycle in its entirety. A Coventry firm has on exhibition more than thirty specimens of safeties alone, some weighing only 18 and none more than 30 pounds, the finer grades furnished with the twisted tubing which is only used in their construction. A Birmingham company has a large assortment installed in a richly furnished section, finished in mahogany with a neat office in the centre. Its standard machine weighs 37 pounds,

the racer being only about half as heavy, and as one of its specialties is shown a bicycle for women. In the section containing a Nottingham made machine is a large case filled with medals, cups, and other prizes won by its rider, now generally recognized as the world's champion. The company also furnishes a record for 1892 of 100 notable races in which the machine and rider participated, the contests being held in Great Britain, Germany, Canada, and the United States.

On the southern wall adjacent to the French section, the institute of British Carriage Manufactures has an interesting collection of paintings, drawings, and engravings illustrative of the gradual changes wrought in the construction of vehicles. In some of them are depicted stage-coach and other modes of travel; in others, the jeering crowds which greeted the first steam carriages, as these crude mechanisms halted midway on a steep hill, or were imbedded in the mire. Convivial coaching parties are gliding swiftly



THE "NANCY HANKS" SULKY, PNEUMATIC TIRES



along green-hedged English roads, and in another series are shown the start, the mishaps, and the conclusion of the first recorded steeplechase. Caricatures are plentiful, both of Irish and English travel, and in hundreds of drawings, here and along the front sections of the gallery, are displayed in outline the construction of state coaches and foreign vehicles, with the heraldic devices placed upon them. Here is an early Spanish coach, there a French carette, and a few feet away the lord-mayor's carriage of 1757, and the magnificent car of state in which rode Louis XIV.



AUTOMATIC FIGURES IN MOTION

Among the members of the institute who have contributed to this collection are Hooper and company, carriage builders to the queen and to the prince of Wales, and the Coach-makers' company, of London, among the rare

drawings furnished by the latter being one of the state-coach said to have been used by John V of Portugal, in 1706.

Among the groups of curios arranged along the front of the gallery is an array of cruel looking spurs, with massive specimens in brass and silver dating from the seventeenth century, and an antique war bit champed by the mailed-steel of a crusader of the middle ages.

In the British section also transportation by sea and land is illustrated by a collection of models from the government of Ceylon, where the visitor may observe the difference



DISPLAY OF A CHICAGO COMPANY

in the construction of the bullock-cart used on low marshy ground and the one adapted to the highlands; or he may see in miniature a carrying chair, a gravel wagon, and a racing cart. Models of boats there are whose outlines are somewhat unfamiliar, especially the catamarans and the outrigger canoes. The latter carry enormous sails, and it is said that the winds that ruffle Ceylonese waters are known as one-man, two-man, and three-man breezes, according to the number of men required to perch on the outriggers in order to keep the craft from capsizing. The double canoes, or fishing boats, the originals of which are made of del wood, closely resemble ice boats. A group of apparatus characteristic of the Holy Land, a contribution from the United States consul at Jerusalem, is composed of



A TURKISH CONVEYANCE



leather bottles, water-skins, mule-packs, jars, bags for carrying babies, and baskets for holding horse feed. Near the model of a boat, such as has been used for centuries upon the sea of Galilee, is a small wooden frame propelled by children while learning to walk.

North of the British gallery section, the Japanese department of communications has an exhibit supplementary to that of its hydrographic and naval bureaus, presently to be described. Here are maps portraying the principal routes of coasting steamers and charts indicating the monthly average of wrecks in given sections, together with the location of light-houses. There are also traced the railway systems of the country; and statistics are plentiful as to the extent of their interests and these of the merchant marine. There are numerous models, from those of the ubiquitous mule which appears to be the common carrier of mankind to the passes of the Usui mountains, showing the Abt railway system and the great bridges over the rivers Kurobe and Nishiki. Additions have been made to the original bridges completed in the 17th century, but the portions built



GENERAL VIEW OF THE EXPOSITION GROUNDS

in that era are still considered remarkable feats of engineering. The structure thrown over the Kurobe, called the Aimoto bridge, is of the cantilever pattern, with a span of more than 160 feet.

North of the Japanese section, and occupying the entire northern aisle, is a large collection of miscellaneous exhibits, as saddles, bridles, and harness; wagon, carriage, and saddlery hardware; carriage lamps, axles, and springs; collars, chains, halters, and blankets, wheels, and hubs; rubber steps, dashes, and fenders; boots for liverymen and leather overalls for cowboys. Some of the groups consist entirely of whips, as that of a Chicago company which manufactures at the rate of 10,000,000 a year. The monotony of these exhibits is somewhat relieved by the groups on either side of the northern entresol, one of them in the form of a saddle, harness, and cart from Palermo, Sicily, the trappings decorated in the highest style of Sicilian art and bedecked with ribbons presenting all the hues of the rainbow. The saddle is surmounted by a red plume and the collar band studded with small glass mirrors. Of the cart itself, every square inch of its body is brightly painted with figures, the spokes, hubs, and felloes with alternate stripes of red and blue. It is a national conveyance, used either for the carriage of commodities or for the conveyance of visitors to local fairs and wedding feasts.

At the opposite end of the northern gallery are photographs and models illustrating the modes of transportation prevailing in South America, their subjects ranging from railway stations and railroad scenery to brute and human pack carriers. Among them are the llama and his burden, the mule driver of Colombia, the



mounted milk-woman, and also the native carrier of the Andes with a traveller's chair strapped securely to his back.

At the gateway to the bicycle and marine exhibits of the United States, the island of Madeira furnishes a unique contribution. First there is a large coach curtained, roofed, and travelling on runners on streets so slippery that wheels would be of no avail. Upon a rear seat the driver urges on the bullocks which drag this odd-looking conveyance over the paved highway. Here also is shown the mountain sleigh, upholstered in red, which slips down the precipitous and well travelled heights with the velocity of a locomotive. Another means of conveyance here reproduced is a mountain hammock, resembling a sedan, which, attached to poles, is carried with its human freight among the mountain peaks of Madeira.

Not far away is a small museum in which are represented ancient types of vehicles. Here is a reproduction of a racing chariot exhumed from a Theban burial ground, and of which the original, in the royal



A POINT NEAR THE WOMAN'S BUILDING

museum of Florence, is probably the only vehicle that has survived the pre-Christian era. Beside it is an unwieldy ox-cart, such as was used by the Pueblos of New Mexico. In the cases which partially surround this exhibit are some of the oldest railroad tickets and announcements issued in the United States, with similar contributions from the railways of Japan.

In the United States exhibit of bicycles, more than forty of the leading manufacturers participate. The display is organized almost on the same plan as that of Great Britain, some of the exhibitors showing special parts of the machine, but the majority presenting the entire mechanism. Many of the collections are housed in handsome pavilions, and not a few are in charge of well-known experts who have won for themselves a wide record while using the machines whose numerous merits they explain so graphically to the interested visitor.

Chicago is well represented in this section, several of the larger factories making a somewhat elaborate display. The Western Wheel works have, in addition to bicycles of many patterns, wheel chairs and children's carriages, all very tastefully arranged in their neat and spacious pavilion. In the specimens prepared for exposition, the Stokes Manufacturing company has avoided the use of enamel nickel plate that the visitor may better judge for himself as to their material and workmanship. The Gendron Wheel company, of Toledo, has one of the largest collections on exposition, including bicycles, tricycles,



velocipedes, children's carriages and sulkies. In a structure composed of brass, a Boston company shows in several styles its bicycles with weldless steel tubing. Beside the perfected machine of 1893 are the parts of which they are composed, either as unwrought material or in various stages of manufacture. There is also a model of the English dandy horse, with the first bicycle worked with pedals, of Parisian make, the first safety, which appeared in 1877 in Boston streets, and the now antiquated machine on which Stevens made his tour of the world. Finally there is a bicycle fashioned for military service, one that has recently been adopted by the army department.

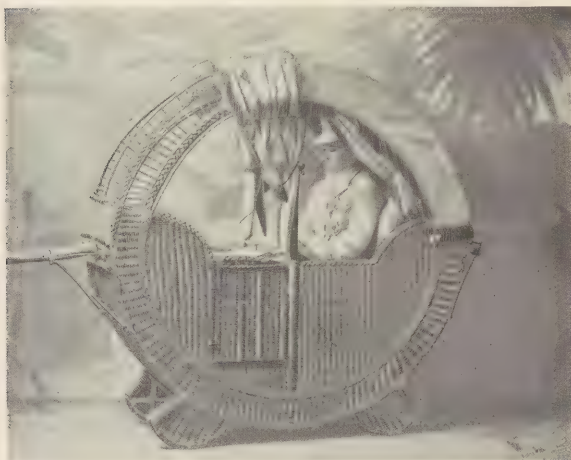
Other features in this division are wooden bicycles from a Newton company of Massachusetts. An exhibiting firm, dissatisfied with its space and position, placed two of its machines upon the gallery railing, the treadles automatically worked by a youth and maiden. A group finished in rainbow tints is among the many ornamental specimens contained in the department.

About midway in the eastern gallery, near the southern end of the bicycle exhibit, are the tent and palanquin in which Mrs French-Sheldon lived and travelled during her journey of 1,000 miles into the heart of the dark continent, attended only by her retinue of Africans. The palanquin is built of bamboo and aluminum, and contains a bed, an adjustable table, and lockers for wardrobe and toilet articles. Around it is reproduced the scant herbage of the desert; here also are the boxes in which Mrs Sheldon stored her supplies and her presents for native tribes.



ORNATE RUSSIAN SLEIGH

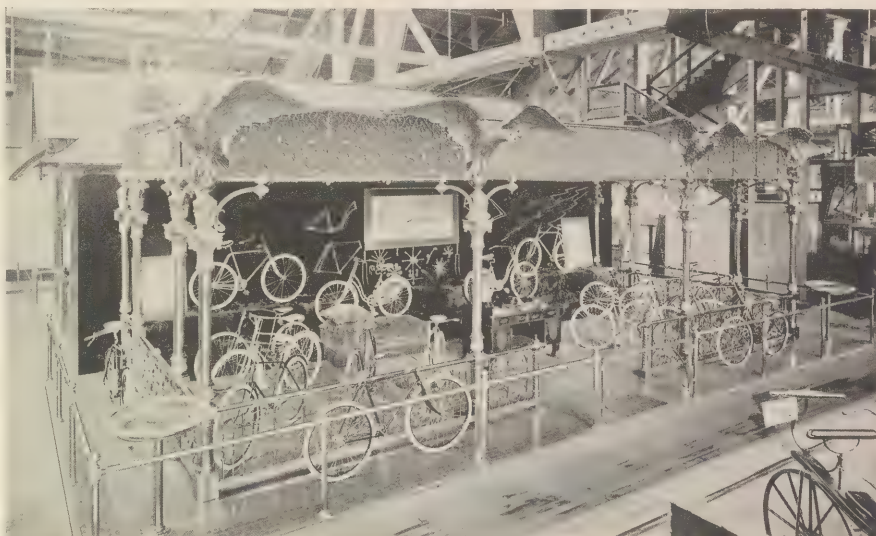
in fac-simile, just as they sailed the seas many centuries ago. After crossing the Atlantic and taking part, as I have said, in the naval review in New York harbor, early in June the caravels arrived, by way of the lakes, off Jackson park, where, as at every port of call, they were received with welcome and ovation. With her four



MRS FRENCH-SHELDON'S PALANQUIN



COACH OF THE LORD-MAYOR OF LONDON



DISPLAY OF BICYCLES

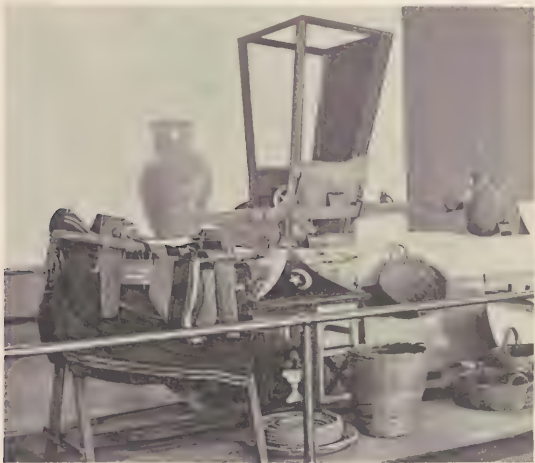


decks, her breast-high bulwarks, her poop some twenty feet above water line, and masts and rigging too heavy for her size, the *Santa Maria* is an ungainly looking craft, one that, without the aid of steam tugs, it would have been impossible to handle on her 9,000 miles of ocean, lake, and river navigation. Of the three craft, this is the only one fitted and furnished throughout to resemble the original type, so far as could be reproduced an obsolete style of naval architecture and equipment. Suspended over the main hatchway is a long-boat



THE VIKING SHIP MOORED NEAR THE "ILLINOIS"

similar to that which the vessel carried, the only one on board. Coiled around the deck are ropes of curious pattern, and the hawsers, nearly half a foot in diameter, are strong enough to hold a first-class man-of-war. There are no capstans, sails and anchors being worked with ropes hauled by main strength. Aft of the ship is the admiral's cabin, with its cramped quarters suggestive of bodily discomfort, its narrow bedstead covered with a counterpane of red damask bordered with lace. Here are numerous relics, including, as is said, the table which Columbus used; his chart, his inkstand, and the nautical instruments of the day; with the flag presented by Ferdinand and Isabella, its white field with cross of green, and on either side the initials of their catholic majesties.

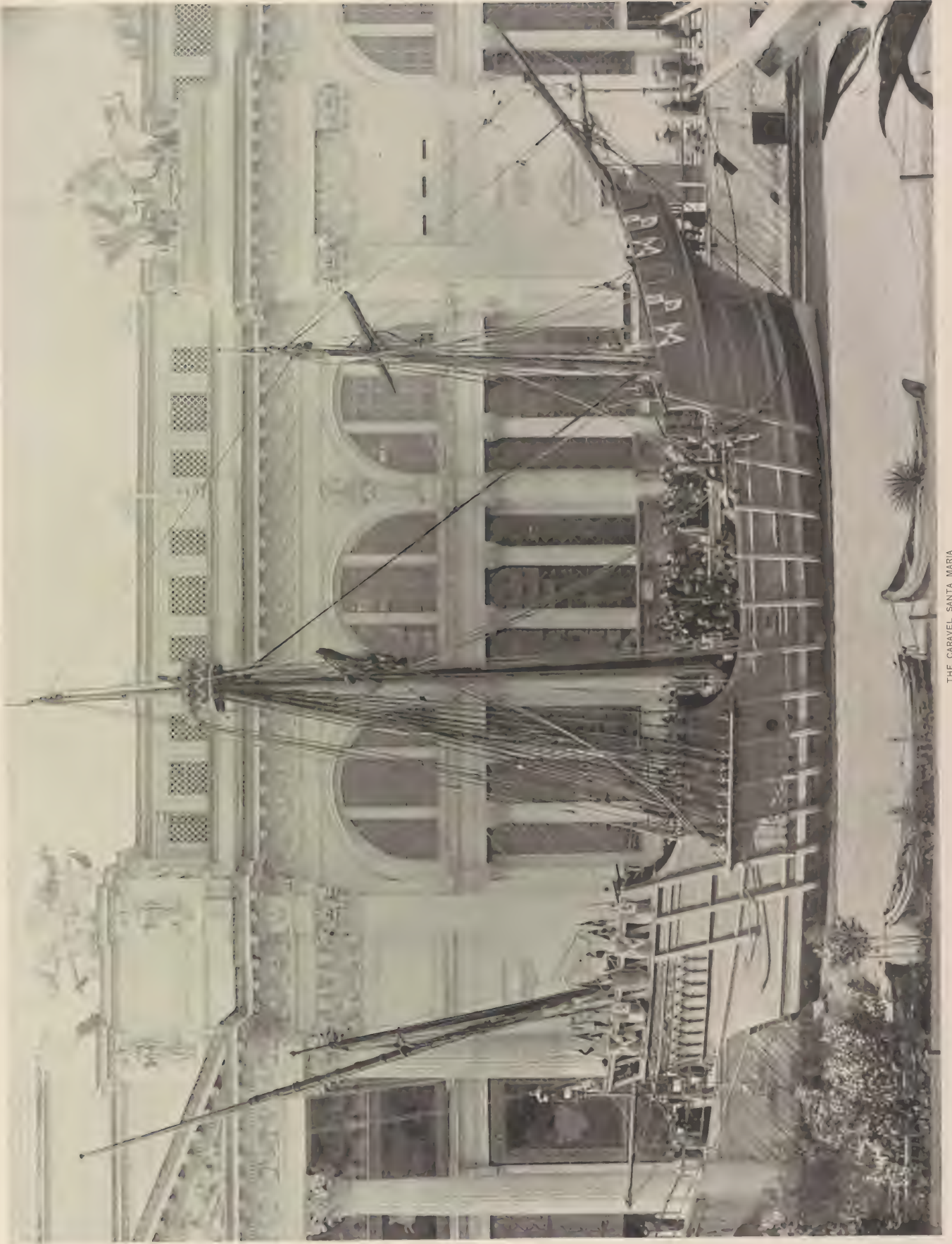


FROM THE HOLY LAND

The *Pinta* is similar in shape to the *Santa Maria*, though of smaller dimensions, and the *Nina*, with her leg-of-mutton sails, is little better than a row-boat, not larger in size than the bireme of the Greeks. But as to these vessels no further details need here be added to the hundreds of descriptions published in the current literature of the day. All the three craft were presented to the government of the United States, and at the close of the Exposition would be cared for by the naval department.

Of the *Viking* ship, resembling the vessel in which,





THE CARAVEL SANTA MARIA



as is claimed, a Norwegian navigator discovered the North American continent nearly a thousand years ago, the following is briefly the story. During the winter of 1879 a sailor, living at the port of Sandefjord, employed his spare time in exploring a mound on the outskirts of the town, where, as tradition related, a Viking had been buried with all his earthly belongings. In this ancient Saga legend the towns-folk had little faith; but the sailor persisted, and after digging a square hole not many feet in depth, his spade struck a solid oak plank, which proved to be the side of a ship. Thereupon the royal university of Christiania sent men to inspect the relic, and in early summer, when the frozen earth could be cleared away, it was found to be the genuine craft of "a Viking old," whose skeleton, encased in armor, still kept guard over his treasure, its wood-work, oars, and equipments all well preserved after the lapse of many ages.



The vessel was repaired and removed to the university, where now is its home, and as the approaching Columbian Exposition began to be the talk of the world, it was determined to send there her counterpart, manned by Norwegian sailors and unattended by any other craft, in order to prove the feasibility of Leif Erikson's alleged expedition, more than nine centuries ago, from Norway to the New England coast. Thus from Sandefjord the vessel built by public subscription, in the spring of 1893 set sail for New York, and in the middle of July anchored off Jackson park. To call her a ship is somewhat of a misnomer, for she has no deck, and carries but little sail. Rather is she a large open boat of some 27 tons, more than 70 feet long and 16 in the beam, with 32 oars, each 17 feet in length, her bow and stern far above her body and her clinker-built planks overlapping like the weather-boarding of a house. Her lines are remarkably beautiful, resembling those of a yacht, the convex curvature of the keel increasing her strength and steadiness of motion. Such is the vessel in which a crew of Norwegian sailors crossed the Atlantic and the lakes, sleeping on reindeer skins and

cooking their food as best they could in the bow of their unsheltered craft.

Reëntering the Transportation building through the golden doorway, the first object to attract attention is a beautiful model of the *Santa Maria*, loaned by the city of Genoa. Beyond this is a broad beamed, battered, old-fashioned craft, with but the faintest traces of paint, one that was certainly not placed here for ornament, and of which the following placard explains its presence: "In this boat, on the morning of September 6, 1838, Grace Darling, then 22 years of age, with her father, rescued nine people from the wreck of the *Forfarshire*, at Longstone, on the Farne Islands." There is no self-righting or other of our modern apparatus wherewith to do battle against winds and waves — nothing but sound



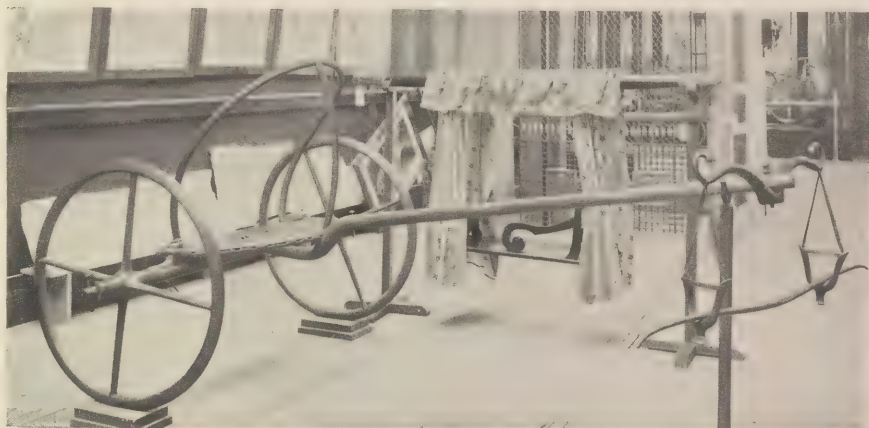
GRACE DARLING

timbers, sturdy arms and the courage which wrought one of the most heroic deeds that history records.

Turning to the marine exhibits of the United States, we find only a small portion of them on the main floor, adjacent to the German section. Here are life-preservers and life-boats, pleasure boats, launches operated



by steam, gas, naphtha, and gasoline, and in the midst of all a caique which has seen service on the Bosphorus and the Golden horn. Of modern pleasure boats there is a fine collection from Thomas Kane and company, builders of the electric launches which ply on the waterways of Jackson park. In this vicinity are many other specimens of small, light craft, with marine hardware, ships' anchors, steering, hoisting, and other nautical apparatus. There are also models of well-known steamships, the most complete exhibit of this character being that of the Harlan and Hollingsworth company, of Wilmington, Delaware, whose progress in marine construction is exemplified in a gallery of pictures and models of the schooners, yachts, tugs, ferry boats, steamers, and propellers built at its works during more than half a century. Altogether more than 300 vessels have been constructed, including, as is claimed, the fastest steamboat in the United States, the first iron screw steamer for inland service,



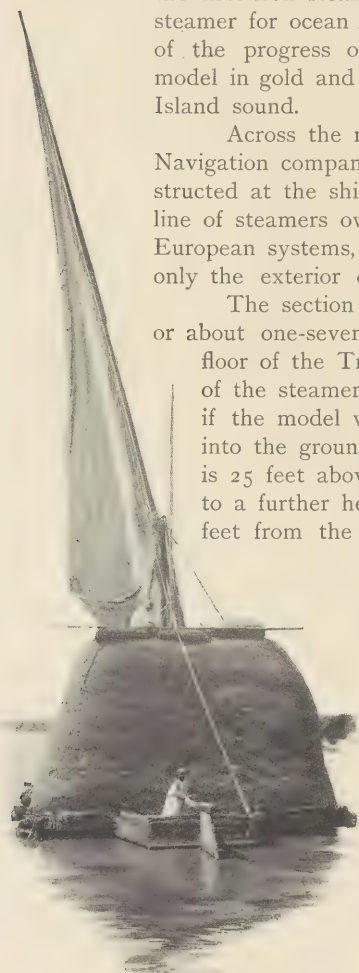
ANCIENT WAR CHARIOT OF SCYTHIA

the first iron steam pilot boat, the second largest transfer steamer in the world, and the first iron steamer for ocean service, completed in 1844, these and others forming a chronological panorama of the progress of ship-building in the United States. In this pavilion is also a working model in gold and silver of the machinery in one of the company's iron steamers running on Long Island sound.

Across the main aisle near the southern entrance-way, is the exhibit of the International Navigation company of Philadelphia, consisting of a full-sized section of a steamer now being constructed at the ship-building yards of William Cramp and sons. As this is the only transatlantic line of steamers owned in the United States that will bear comparison with the Cunard and other European systems, the display is of special interest to American travellers; for here is shown not only the exterior of the vessel but all its internal arrangements, furnishings, and equipments.

The section is more than 70 feet long by 35 in width, or about one-seventh of the entire length of the ship. The floor of the Transportation hall represents the water line of the steamer, which is 26 feet above the keel, so that, if the model were complete, it must sink that distance into the ground. As here it stands the promenade deck is 25 feet above the floor, above which rises the funnel to a further height of 53 feet, thus giving a depth of 104 feet from the top of the funnel to the bottom of the

keel, the former almost touching the roof truss of the building, and painted black with a band of white, as the distinguishing mark of the company, to which belong the well-known steamships, *Paris* and *New York*. The sides are studded with port-holes to a height of 17 feet above the floor, where the iron plating ends and the railing of the second or saloon deck begins. Above this is the first or promenade deck, and above all, the bridge, whence orders are given and the course of the vessel directed. Entering from the floor, the first compartment contains an array of models of steamers, for one of which, that of the *Paris* a gold medal was awarded at the Exposition of 1889. Next are the steerage quarters, with family rooms and single berths for men, with thorough ventilation and electric lighting, as in other portions



AN EGYPTIAN HAY BOAT



FIGURES IN TURKISH SECTION

of the ship. A stairway leads from the model room to the deck above, where are first and second-class cabins, the former with sofa and extension berths so arranged as to communicate when required for family use. Ascending to another deck, the visitor enters a large, open hall, handsomely finished in dark mahogany and





SUITS FOR RUSSIAN DRIVERS

gold. Passing thence to the right he comes to the dining saloon, with wood-work, chairs, and tables of white mahogany, and with walls and ceilings in light green panellings relieved by silver mouldings. In the centre is an arch of glass panels through which sunlight is admitted by day and electric light by night, its base supported by carved allegorical figures and surrounded with groups symbolical of commerce. At one end of this deck is a suite of rooms, the chamber containing a double bedstead with folding wardrobe and opening into a bath-room, while in the sitting-room the sofas can also be used as

berths. The decorations of the suite are in ivory and gold, with upholstery to match, frescoed panels and ceiling artistically painted.

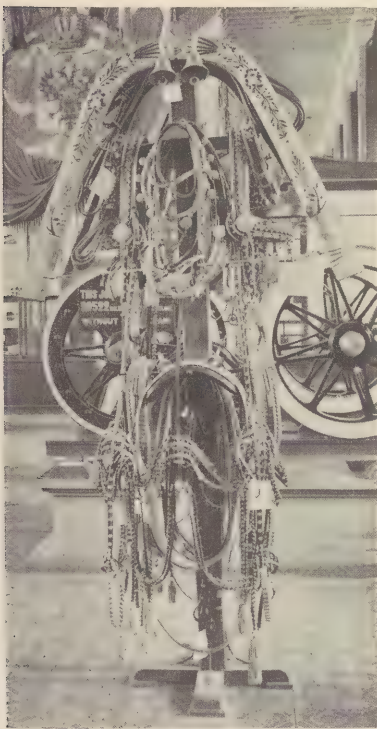
The highest or promenade deck is in three divisions, first of which is the hall around the stairs or companionway, corresponding with the one below and the same as to size and finishings. Then comes the library, with wood-work of dark mahogany, ceiling tinted in gold, and lighted by large square windows, above which are smaller windows for purposes of ventilation, the former covered at night by sliding sashes of leaded glass, fitted with electric burners. Seats upholstered in dark plush are ranged along the outer walls, with tables and writing materials. Finally there is the smoking-room, handsomely furnished as are all the rest, with carved mahogany chairs arranged in three sides of a series of hollow squares, and a table in the centre of each.

No wonder that 20,000 persons on an average passed daily through this sectional model exhibited by the International Navigation company. Here is in truth embodied the luxury of travel by sea, with carpeted floors, the richest of furniture, and all the appointments of a luxurious home. By Doctor Johnson a ship has been described as a prison house, with the additional disadvantage of the risk of drowning; but the good doctor did not make his historic journey to the Hebrides on board a modern transatlantic liner.

Passing from the promenade deck, one may step into the gallery of the Transportation building and there commence his examination of the large array of American marine exhibits, extending thence northward for several hundred feet. Here are not only exhibits from every portion of the United States, showing the present status of marine construction and its historic development, but from travellers, naval officers, consuls representing the government in many distant lands, and from foreign commissions are also numerous collections. In this section the main purpose is to illustrate the forms of marine architecture prevailing in the United States, the curios from other lands, serving as a foil to the specimens wherein are represented modern enterprise, ingenuity, and skill. For example, above the large model of a shipbuilding plant are suspended a black wooden canoe from the isthmus of Panama, and a raft of straw from Lake Titicaca, such as are used on the inland waters of South America. Near by is an old batteau, found on the banks of the upper St Croix, in Wisconsin, and contributed by the historical society of that state as an illustration of the



CORDAGE OF THE RUSSIAN NAVY



ARTISTIC SADDLERY



French-Canadian style of river craft in the early fur-trading days of the northwest. Though called a canoe, it weighs several thousand pounds, and was built to carry a score of voyagers and traders and a ton of goods.



AFRICAN BOAT MADE OF LOGS

are Alaskan canoes, in one of them the figure of a native fisherman and hunter armed with weapons of the chase. Here an Australian bark canoe may be compared with the Alaskan haida of cedar, and a boat from Hammerfest, Norway, with models of the craft which float on Chinese waters. Of all the collective exhibits from foreign lands, that which the Siamese commission has furnished is the most extensive, and the one most thoroughly typical of the country and people which it represents. It consists of about 100 models, including ponderous junks, in shape not unlike the Spanish caravels, and low tapering boats with sharp bows, similar in shape to racing shells, but inlaid with gold and pearl and otherwise decorated in oriental fashion. There are also craft intended for river service, for the sea, and for fishing and pleasure boats. In another department are models of carts, coaches, and sedans, both for common use and for weddings, festivals, and state occasions.

Turning again to the exhibits representative of modern naval architecture, may first be mentioned that of the Union Iron-works in San Francisco, near the gallery exit from the model displayed by the International line. Suspended from the roof of a handsome pavilion, broad festoons of silk serve as a canopy for realistic models of its workshops, ship-yards, docks, and vessels in process of construction or afloat on the waters of the bay.

In a section opposite is a relief map of the Nicaragua canal, a working model illustrating the projected system of locks, excavations, and dams. The map, which covers about 100 square feet, is constructed

Not far away are beautiful models of the Columbian caravels, with whose outlines we are familiar, and a number of cases filled with tiny models of Hindoo chairs, carts, rafts, boats, and canoes, with illustrations of the marine architecture of India, ranging from the luxurious barge of state which plies on the lake of Kashmir to the rounded piece of wood on which the native lies face downward, propelling himself with his feet and fishing as he goes.

In another section is a Venetian gondola, finished and furnished in ebony, near which



SECTION OF AMERICAN STEAMER





STATE ROOM OF AMERICAN STEAMER

into the so-called Tola basin, and then set adrift in another cut, representing a canal eight miles in length. The distance from the Pacific ocean to Lake Nicaragua is only twelve miles, but from this side much of the heaviest work is yet to be accomplished, including the blasting of solid rock 70 feet in thickness. The route projected is across the lower end of the lake, south of the inactive volcanoes of Ometepe and Madera, past old Fort San Carlos, where light dredging is to be done through volcanic ashes, and into the Rio San Juan, through which for 64 miles it runs to the commencement of the eastern artificial channel. The channel, which is more than 30 miles long, contains three locks, and thus at length the vessel passes into the harbor of Greytown and the Atlantic ocean. Of the total distance from sea to sea, nearly 170 miles, Lake Nicaragua, San Juan river, and the natural basins furnish 142 miles of free navigation.

In an adjacent section is illustrated the construction of the huge log rafts and tow-boats of the Mississippi, and opposite is a collection of models, photographs, and paintings, showing how whaleback barges and steamers are built

on a vertical scale of one to 2,000, and a horizontal scale of one to 30,000, this proportion allowing the engineering details to be plainly indicated, the points where work is being done or has been projected, being shown by patches of red. Lead pipes are molded into the ground work of the map, and when the water turned into them fills the beds of Lake Nicaragua and the San Juan river, the nature of the enterprise is at once understood. From a dam constructed about midway between the reservoir and the Atlantic, the waters of the river can be raised to a level with those of the lake.

In order to float a chip, which here represents a vessel, from the Pacific to the Atlantic, it must first be carried into a miniature canal cut for a mile and a half through the rocky ridge of the continental divide, lifted over three locks



DINING ROOM OF STEAM-SHIP





MADEIRA'S BULLOCK SLEIGH



PAINTED CART FROM SICILY



MOUNTAIN SLED USED IN MADEIRA



COLUMBIAN INDIAN WITH CARRYING CHAIR



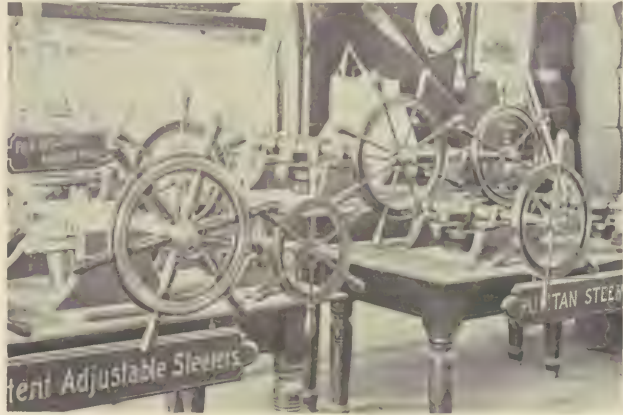
CARRIERS OF SOUTH AMERICA





SUITE OF STATE ROOMS

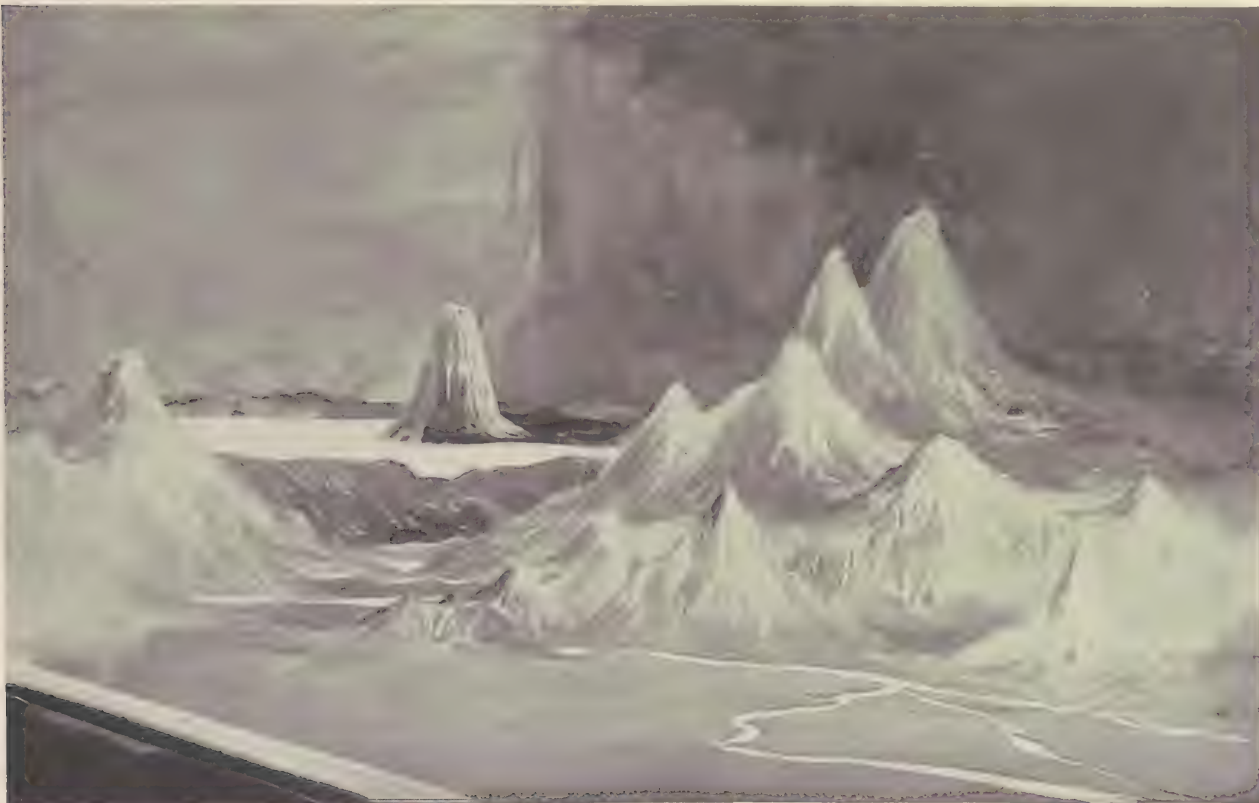
at the yards of a company whose headquarters are at Superior, Wisconsin. Near by is a relief map, resembling rather a plaster model of St Thomas island, in the Danish West Indies, by Charles E. Taylor. Here are reproduced, with remarkable fidelity of detail, the waves of ocean



STEERING APPARATUS

breaking on the shores, the fringes of cocoa palms that surround the island, the ships in the harbor, including the caravels which touched there, the dry docks, fishermen's huts, and the houses and streets of the seaport. Around it are terra cotta plaques and photographs presenting views of the island scenery upon a more extended scale.

In another relief map is shown the entire canal system of the state of New York, with the topography of the adjacent country clearly illustrated. This is the work of Martin V. Schenck, state engineer and surveyor, and with it are models of the doubled and lengthened locks, showing how the products of the west are conveyed rapidly and cheaply to the seaboard. Of historic interest is the model of the original lock built at Little Falls



MODEL OF NICARAGUA CANAL



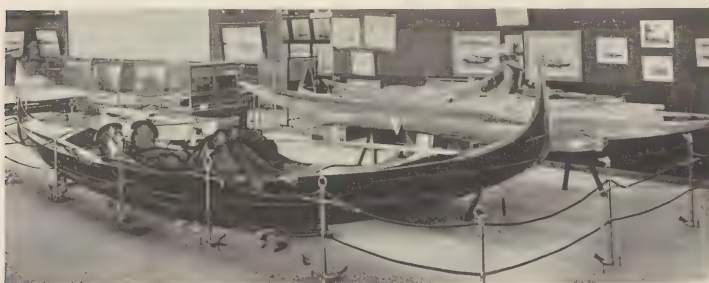


BLOCKS PULLEYS AND HOISTING GEAR

historic and pictorial. In the centre of a boat, for instance, are the original screw steamboat, built by John Stevens, of Hoboken, New Jersey, in 1804. This is a portion of the exhibit of a ferry company of that city, and adjacent to it are models and pictures from a New York company, showing the architectural evolution of the steamers which ply on Long Island sound, from the Fulton to the latest craft launched from New England ship-yards.

Harper and brothers and other publishing houses have selected from the best of their art works, extending over many years, sketches, drawings, and engravings, representing modes of transportation

among many peoples and countries, ranging from the war canoes of the Congos to the cruisers of the white squadron, and from the bullock cart of Siam to the steam leviathans of modern railroads. In one section may be traced the development of our naval architecture, and in another is shown the excitement produced in the



VENETIAN GONDOLA AND ALASKAN BOAT

in 1795. In still another map covering an entire wall is shown the water route from New York to Duluth, and there are photographs of canal steamers, aqueducts, and points of interest along the Erie route, with statistics covering the entire history of the system.

In a modest booth, not far away, the state commissioners of Maine have models of famous ships which have sailed from their ports, and in a corner of this section is a small old-fashioned cannon, captured from the British brig *Boxer* during the war of 1812. Beyond a pavilion which contains the models of the ship-yard and steamers of a Virginia company, the exhibit is largely

engine and boiler of the first twin screw steamboat, built by John Stevens, of Hoboken, New Jersey, in 1804. This is a portion of the exhibit of



MUSEUM OF MARINE MODELS

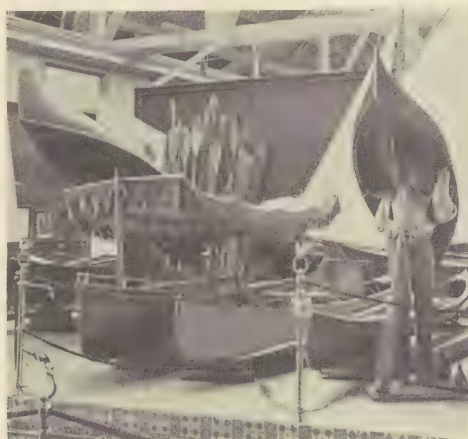
land of the Pharaohs by the advent of the bicycle. In addition to these collections are several galleries filled with paintings of marine subjects. Among them are scenes along the coast of Jersey, some of them depicting the dangers that confront the pilots of Sandy hook. Here also is Farragut's fleet and the harbor fronting the World's Fair city. But the most complete exhibit, one illustrating the development of the merchant service of the United States together with ingenious types of oriental craft, is that of the Essex institute



and Peabody academy of Massachusetts. Salem is one of the oldest seaports in the country, and the pictures of her ships, some of them water colors by Ross Turner, cover the period from 1765 to 1893. There are also



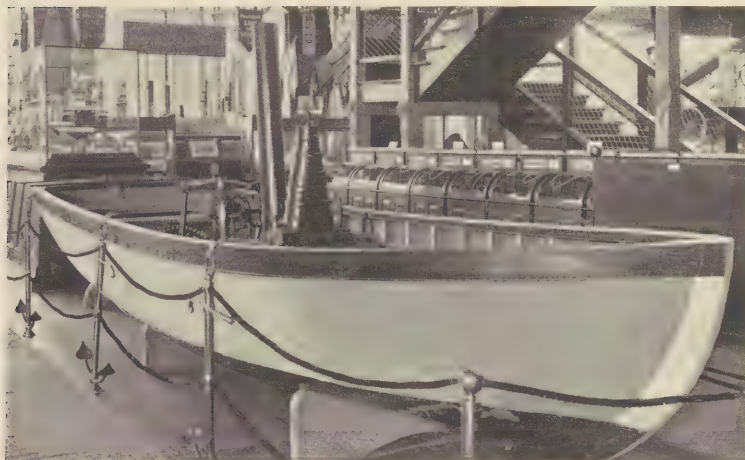
BRAZILIAN CRAFT



OF INTEREST TO SPORTSMEN

models of old English frigates, as of the *Sovereign of the Seas*, launched in 1637, in contrast with which are those of Chinese freight and fishing craft, and a mandarin dragon or racing boat.

The marine display of Great Britain is on the ground floor of the Transportation building. Here is a



TWIN SCREW AND BOILER OF "JOHN STEVENS" BOAT

complete representation of the history of British ship-building for more than three-score years, showing the progress made in the construction and equipment of her naval and merchant service, her steamers and sailing vessels, torpedo boats, launches, tugs, and the craft used for river and lake navigation. By the Thames Ironworks and Shipbuilding company is illustrated in models the development of the British iron-clad, beginning with the *Warrior*, launched in 1860, and then believed to hold the navies of the world at her mercy. Her armor, more than four inches in thickness would resist a 68-pound shot, then the heaviest projectile used, and as was thought the heaviest that could be used; but year by year the invention of more powerful weapons called for heavier armor,

until to-day 20-inch plates are considered none too thick for a first-class line-of-battle ship. In other models the history of naval architecture is brought down to the present time, the list including the *Minotaur*, successor to the *Warrior*, but of larger size, the *Sanspareil*, of 10,500 tons displacement and 14,000 horse-power, and the steel cruisers *Blenheim* and *Theseus*, both with a speed of more than twenty knots. Then there are war vessels built for various foreign nations, with steam and sailing yachts and craft for special service.

From the works of Armstrong Mitchell and company, at Newcastle-on-Tyne, comes probably the largest model of a ship that was ever exhibited. It is that of the ill-fated *Victoria*, reproducing on a scale one-twelfth of the original size, and with all her armor and equipments to the smallest minutiae of detail, a 10,500 ton vessel, 360 feet long and one of the most powerful of her class. Only the star-



FOLDING BOATS FROM MICHIGAN



board side is presented; but in the mirrored background is viewed the entire ship resting on an unruffled sea, amid the accessories of naval warfare imitated in most realistic fashion. The model and its guns are of steel and nickel plate; the anchors and cables of polished steel, with boats in fac-simile, and a netting of wire for protection against torpedoes. Another model is that of the *25 de Mayo*, a cruiser built by this firm for the Argentinian government.

From a Clydebank firm are models of several war vessels, including the *Ramilies*, launched in 1892, one of the most powerful battle-ships afloat, and the *Reina Regente*, a Spanish cruiser which took part in the naval review in New York harbor, with channel and Atlantic steamers, the latter with a speed of twenty-three knots an hour. A London house shows models of torpedo boats and torpedo boat catchers, with one of the *Opale*, built in sections for the French

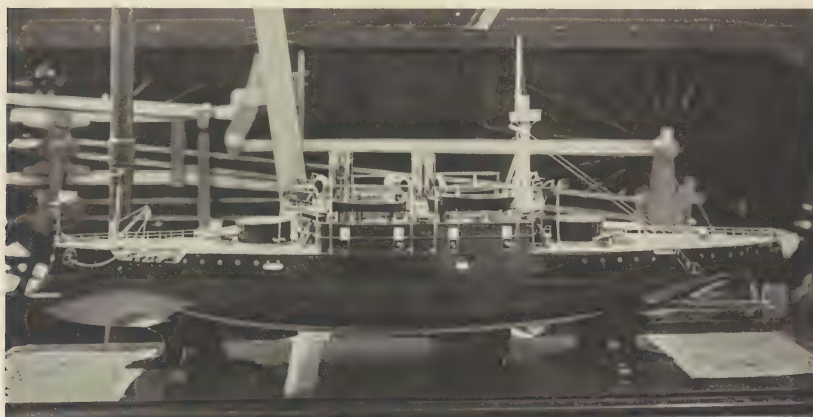


MODEL OF VIRGINIAN SHIP YARD



PORTION OF THE BRITISH MARINE SECTION

government during the Dahomey campaign. From the Sheffield works are exhibits of armor plates and naval apparatus, and from other firms are quick-firing guns, including those of the Nordenfolt and Adamson patterns.



MODEL OF ENGLISH WAR-SHIP

In the display of the Cunard Steamship company are models of its most powerful vessels, beginning with the *Britannia* of 1,139 tons and 740 horse-power, built in 1840, and ending with the *Campania* of 12,500 tons and 24,000 horse-power, launched in 1893, the latter 620 feet in length, or only 60 feet shorter than the *Great Eastern*. All the models were constructed by the company's naval architects, on the scale of one fourth of an inch to the foot. They are contained in glass cases, resting on carved oaken tables, and with ivory tablets descriptive of each of the exhibits.

In smaller models the Peninsular and Oriental company illustrates, in periods of a decade each, the various types of steamers used and now in use since first it took the field, in 1837, with two vessels little



larger than the life-boats which to-day its ocean greyhounds carry. In map form are shown all parts of the world to which its service extends, and information is here afforded as to the progress of naval architecture and engineering during the term of the company's existence. The operations of this company are on a gigantic scale, with nearly threescore steamers plying on the Atlantic, Pacific, Mediterranean, and Indian oceans, representing a value of \$35,000,000, and with subsidies of \$1,650,000 a year from the British and

other governments. In return, more than one-half of their boats are armed as cruisers, ready for instant service, and all are subject at the briefest notice to the orders of the British admiralty.



DISPLAYED BY THE STATE OF MAINE

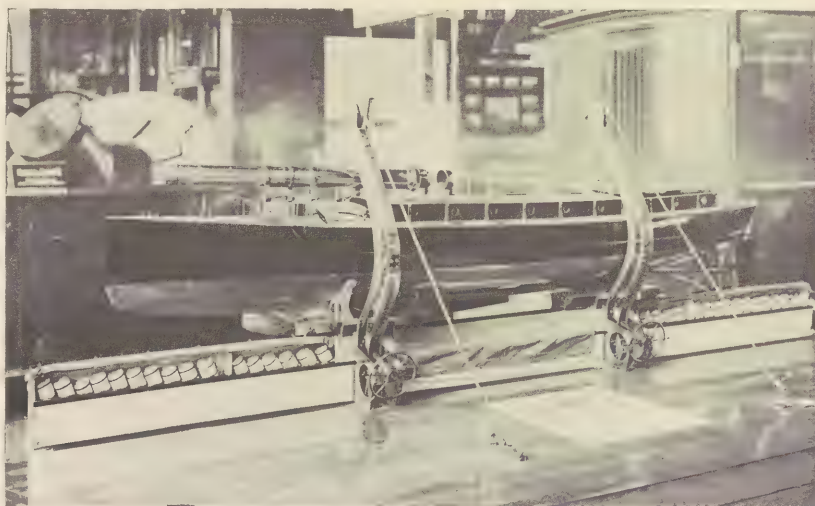


A COSMOPOLITAN TOURISTS' COMPANY

From the Laird brothers, of Birkenhead, is also an elaborate collection of historic models, one being that of the steamer, *John Randolph*, launched in 1834, and another a reproduction of a steam-yacht built for the Vanderbilts in 1893. Among them are represented vessels built for the Chilean navy, the cause of recent troubles with the United States. The Atlantic Transport line, whose headquarters are in London, reproduces the twin-screw steamers which carry live-stock and meats in the carcass from American to British ports. A West Hartlepool company shows one of its cargo steamers, constructed of steel on the web-frame system, and carrying a dead weight of 6,500 tons. Elsewhere are models of the paddle and screw steamers built at Dumbarton

works, and of those engaged in the mail service between England and South Africa. From other firms, models, apparatus, rigging, and naval equipments of many kinds complete a varied and interesting display.

In connection with the British marine exhibit may be mentioned that of the well-known firm of Cook and son, which, beginning operations in July 1841, when a few hundred passengers were carried a short distance by excursion train at the rate of a shilling a head, issued in 1892, nearly 4,000,000 tickets, for routes extending over more than 1,800,000 of railroad, ocean, lake, and river. The display consists mainly of models and publications descriptive of its system of transport and travel in various countries and periods. Among the models are those of vessels built for tourist service on the Nile, one of them, the *Rameses the Great*, being shipped to

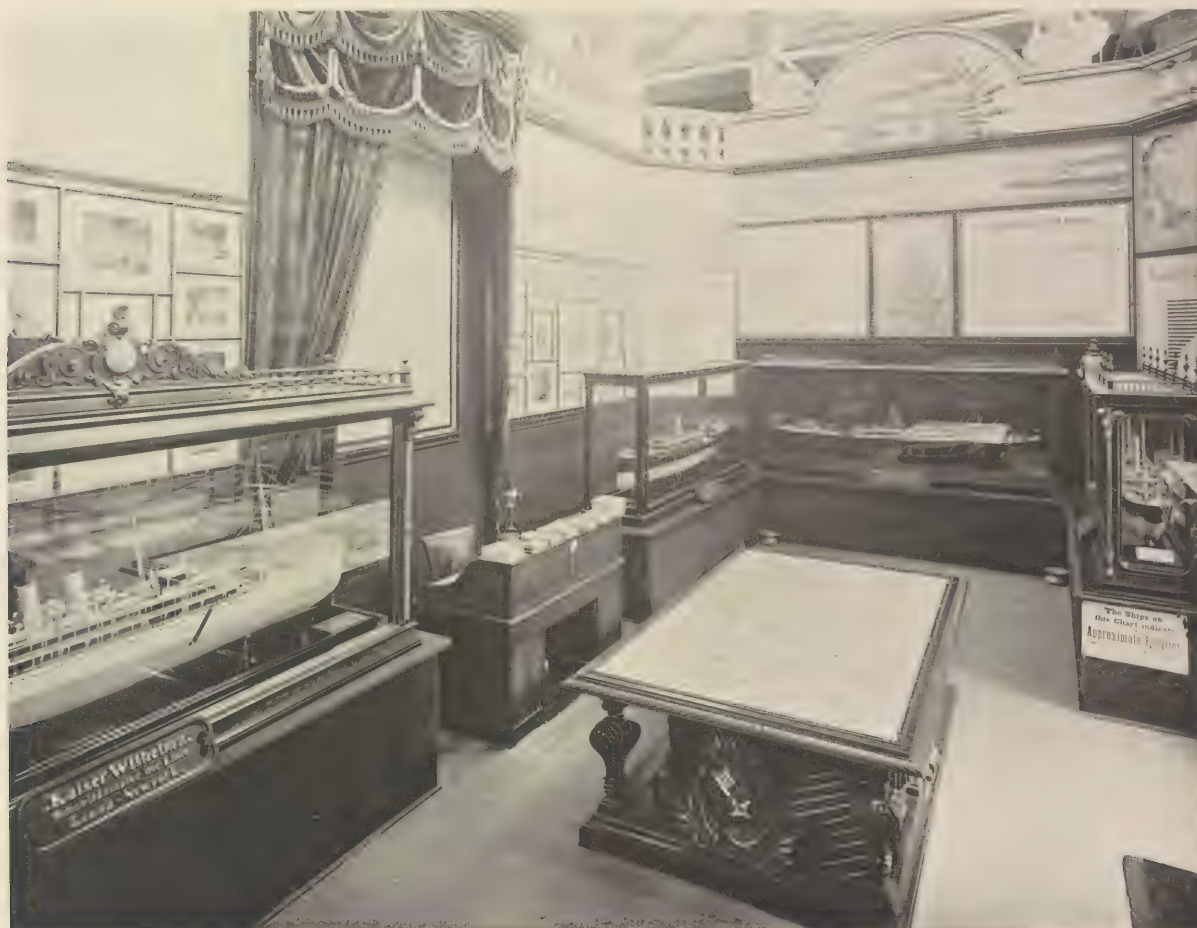


MINIATURE MAN-OF-WAR



Cairo in sections filling 3,750 cases, and there put together by 400 workmen, with the use of 70,000 rivets. Of dahabeahs, built specially for voyaging in comfort on the Nile, there are several specimens. Here also are models of ancient funeral boats, said to have been disinterred from the tombs of Upper Egypt, 4,000 years ago; and copied from the originals at the royal arsenal at Venice, are reproductions of Venetian gondolas from the 15th to the 19th century. In another model is presented the Egyptian temple of Edfou, a Ptolemaic structure with massive walls and propylon towers, which, in the pre-Christian era, served at once as military stronghold and priestly tabernacle. In photographs are displayed some of the company's offices, forming a continuous chain around the civilized countries of the world.

In the Canadian section near by, the largest of the marine exhibits consists of models of steamships plying between British Columbian ports and those of China and Japan, in connection with the service of the Canadian Pacific railway. A study of these models, in connection with the railroad display already described, will explain



IN THE PAVILION OF A GERMAN STEAMSHIP COMPANY

in part how it is that this powerful corporation is gradually wresting from the United States the most valuable portion of the foreign commerce of the Pacific coast. From private firms are smaller craft, both as models and originals, and by the department of public works at Ottawa is reproduced its system of locks and canals.

Prominent among the ground floor exhibits of Germany is that of the North German Lloyd Steamship company, an organization owning about 60 ocean steamers, with a total registration of some 200,000 tons, running to North and South American, Asiatic, and Australian ports. Its display is arranged in a neat pavilion, and consists mainly of models of its vessels and charts and maps illustrative of its operations, one of the latter showing the exact position of each of its steamers at a given hour of the day. By the Hamburg-American Packet company are shown models of its fastest boats, contrasting strangely with the reproduction of a primitive craft on which they stand.

In the southern galleries are models of ships constructed within recent years for the imperial navy or for the more prominent transportation companies. Among ironclads is the *Kaiserin Augusta*, which held the post of honor in the German squadron at the naval review in New York harbor. In plans and models are also traced the principal inland waterways of the empire, the most striking exhibit of this character being from the imperial canal commission. It includes a reproduction of the harbor and dry-docks at Kiel and a large relief



map showing the course of the northeast canal from the river Elbe to the Baltic, and the physical nature of the country through which it passes. Of the curios in this section may be mentioned the model of an ancient boat, the original of which, 75 feet in length, was found in the frozen marshes of the Baltic sea.

The marine division is but a portion of a collective exhibit of engineering installed in the southern galleries, including plans and models of harbors, railroads, and bridges constructed by the government, with diagrams of public establishments and illustrations, in many forms, of the sewerage, water, electric, and gas systems of the principal cities of Germany. Most of the contributions are from municipal governments, especially from those of Berlin and Frankfurt. From the imperial capital are publications and plans of its asylums for the insane and epileptic, of public markets and bathing establishment, and of its sewage system, with the places where the fertilizing refuse is deposited. There is also a beautifully constructed model of the Kaiser Wilhelm bridge, with plans of structures of lesser note. A pavilion



contains the exhibit from Frankfurt-on-the-Main, the chief object of which is to illustrate by drawings, plans, and descriptions the new water supply and drainage works of the municipality. Details are presented as to flooding, ventilation, house-drainage, and siphon construction, and the machinery used for preparing chemical disinfectants and for removing the slime from disinfecting tanks.

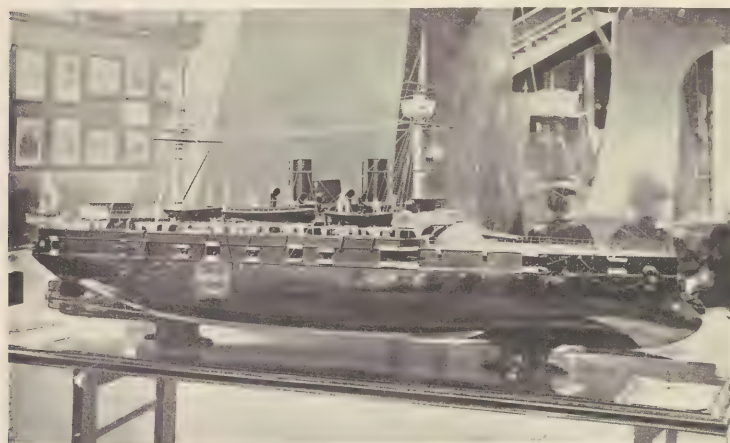
In addition to the collections specially prepared by the imperial and local governments, there are private exhibits in the engineering department. One company presents models of various apparatus for distilleries, breweries, starch, sugar, and yeast factories; another exhibitor shows his plans for what he considers model agricultural buildings; and elsewhere are reproductions of pottery works, smelting furnaces, and mining machinery, while specialists indicate how life-boats may be built of aluminium, with the latest ideas regarding the construction of dredging and hydraulic machinery.

In the French gallery section the General Transatlantic company has eight large paintings or dioramas



SCENES FROM THE FRENCH DIORAMA

by members of the salon which caused so much comment at the Paris Exposition of 1889. Each picture is at the back of a booth, the entire framework being of a rich maroon, so that the visitor seems to be looking into the scene rather than at it. Now he sees the embarkation of passengers at Havre for New York, with the waving of handkerchiefs, tearful embraces, and farewells. Next is the dining-room with passengers engaged in conversation over their meal, and then the smoking-room where men are enjoying their cigars and wine, their cards and backgammon. Near by are depicted the arrival of an African steamer at Marseilles, and a French boat at the harbor of Algiers, with the workshops of the company and a steamship in process



MODEL OF MAN-OF-WAR

of construction. There are also models of several of the finest boats, especially those which run between Havre and New York. Another notable feature is the exhibit from the chamber of commerce at Dunkerque,



including a mammoth painting and a relief map showing the harbor and dockage system of the port. In this vicinity, as an exhibition of industrial art, are several large screens of opalescent glass. Finally, there is reproduced in the French section on the main floor the cabin of a channel boat running between Dieppe and New Haven.

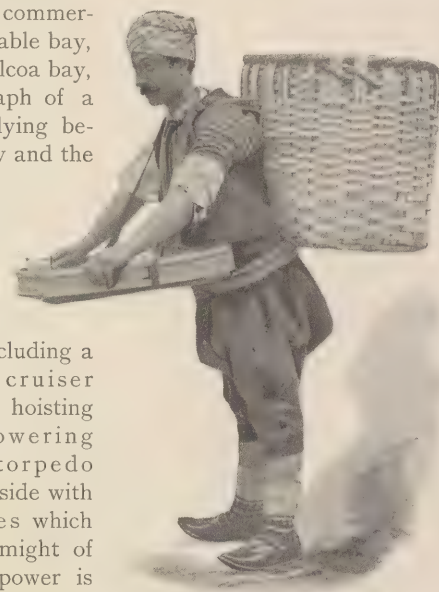
Between the German and French sections the Netherlands and Cape colony are represented in the gallery by small collections of drawings and photographs, the former contributed by the Royal institute of engineers. Here are shown the harbors of Rotterdam, Amsterdam, and Batavia, with views of the more important waterways of Sumatra.

The Cape illustrates the beauties and commercial advantages of the harbors of Table bay, Port Elizabeth, East London, and Alcoa bay, with a photograph of a mail steamer plying between the colony and the mother country.

In Russia's section, on the ground floor, is a large exhibit from her naval department, including a model of the cruiser *Rurik*, with the hoisting apparatus for lowering and raising torpedo boats. Side by side with the miniatures which stand for the might of Russia's naval power is a reproduction of the *Yahl*, the boat in which



CANOE, FROM AFRICA



A TURKISH CARRIER

Peter the Great first learned to love the sea and formed the plans that resulted in the founding of the navy, of which the original of this tiny craft, less than eleven feet in length, has been called the grandfather. Elsewhere are coils of rope such as are used by men of war; and beyond is a small model of a train of military hospital cars, the history and present condition of the naval department being also represented in government literature.

Across the hall is an exposition of the work which has and is being done by the naval department of Japan. One of the walls is covered with charts, maps, and inscriptions explanatory of the work of the hydro-



FULL SIZE MODEL OF BATTLE SHIP "ILLINOIS," IN WORLD'S FAIR HARBOR



graphic office, established in 1870. There are drawings showing the configuration of the coasts, their safe channels and their dangerous reefs, and here the statement is made that this is the first attempt by any Asiatic country to furnish its navigators with nautical charts, the progress achieved in this direction being without the aid of foreign engineers. In this section is a modern rapid-firing gun with automatic recoil carriage, and there are models of steamships, one of them showing a transverse section, and of a boiler intended for a Japanese cruiser fashioned by the students of the dockyard school at Yokosuka.

Among the curiosities in the northern gallery are the log canoe and dugout sent by the United States consul at St Paul de Loando, the capital of a Portuguese colony on the western coast of Africa. The canoe,



THE GOLDEN DOOR AND ITS REFLECTION

or so-called bimba, resembles the catamaran, its frame resting on a raft as in Chinese river craft. These clumsy devices are also reproduced in photographs, the dugout containing a dusky occupant whose naked body glistens as brightly as the waters that surround him.

Near the Austrian section on the ground floor of the hall, Spain illustrates the historic development of her naval architecture. Almost side by side with models of the Columbian caravels are the iron-clads of her modern navy, and in prints on the outside of the booth may be traced the evolution of her merchant marine and war ships up to the present day. From the arsenal at Cartagena and the manufactories of Barcelona are cables, cordage, and other nautical appliances.

In the northeastern portion of the annex, and in the northern part of the main building, small sections are occupied by Spain, showing the character of her coast defenses and other engineering works, with the progress made in the construction of her weapons. From the museum of royal engineers comes a large collection of models of such fortifications as those of San Sebastian and Cartagena. The plan of the Havana water-works and bridges, ancient and modern, including the one at Cordova, are also reproduced. The manner of transporting bridges on the backs of donkeys, during a military campaign, is elsewhere illustrated, and in this section is a case filled with the swords, halberds, and other mediæval arms of Toledo make. In the annex are models of fire-arms, and a long array of cannons a contribution from the king, some of them dating almost from the time of Cortés.

In the United States section devoted to naval warfare and coast defense, a few manufacturers illustrate



some of the most recent appliances, a Massachusetts inventor, for instance, showing a pneumatic dynamite gun, with torpedoes as projectiles. But in this group the main exhibit is from the Bethlehem Iron company, of Pennsylvania. Toward the south of the hall, rising almost to the roof and astride its central aisle, is a gigantic frame, apparently of solid iron, supporting



THE BETHLEHEM STEAM HAMMER

by the fact that it would almost have blocked the central passage-way of the building. Here, then, is the shadow of the huge implement which welded the armor plates, steamer shafts, and other massive articles grouped in this section of the hall. A plate of steel armor, more than ten inches thick, is shown as battered by a shell travelling 700 feet a second, and near it is the first plate made by the company in 1891, two 100-pound shells having pierced its eleven inches of solid metal. A nickel steel plate for the battle-ship *Indiana*, protecting one of her thirteen armored sections, is 17 inches thick, 12 feet high, and weighs nearly 70,000 pounds. Near by is the model of a casting for heavy armor plates, 18 feet high, nearly half as wide, and 52 inches thick, with a weight of 25,000 pounds. By way of suggesting how such armor can be penetrated, the company shows a piece of naval ordnance, 36 feet long, weighing more than 50 tons, and with a twelve-inch breech. The manufacture of shafting requires even more skill than that of gun forgings,



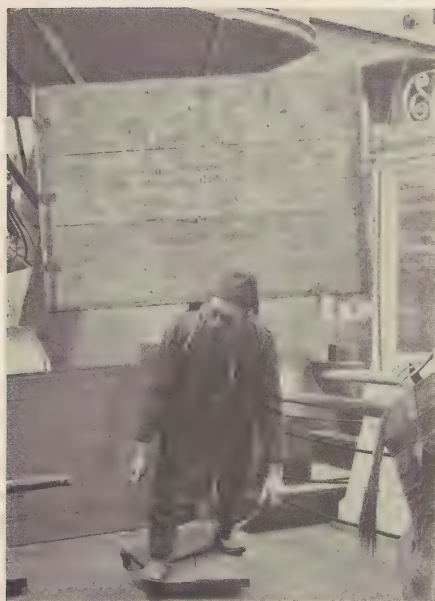
IN THE GALLERY

a huge hammer of cylindrical shape. This imposing structure, 90 feet in height, with a span of nearly 40 feet, is a reproduction of the apparatus which carries the steam forging hammer of the Bethlehem works. The original mechanism weighs more than 2,000 tons, and the ram and rod 125 tons, forming the largest hammer in the world. The replica is of wood and staff, and the absence of an anvil is explained



PROJECTILES FOR HEAVY ORDNANCE





GOODS FOR THE EXPOSITION

and the exhibit in this line includes a hollow shaft for the Old Colony Steamboat company about 40 feet in length, and finished cranks for the cruiser *Minneapolis* and the steamer *City of Sydney*, of the Pacific Mail line.

Another extensive exhibit of ordnance is that of the Hotchkiss company, in an outdoor space adjoining the annex on the southeast. Projectiles for rapid-firing guns are shown, with pierced steel plates from one to four inches in thick-



MAN'S UNIVERSAL BURDEN BEARER

ness. There are naval landing guns with a range of nearly a mile, rapid-firing cannon carrying shells of from one to fourteen pounds, and

various specimens of the revolving style and those which are best adapted for use in a rough or mountainous country, together with horse battery caissons carrying as much as 96 rounds.



ON THE FRIEZE OF THE TRANSPORTATION BUILDING

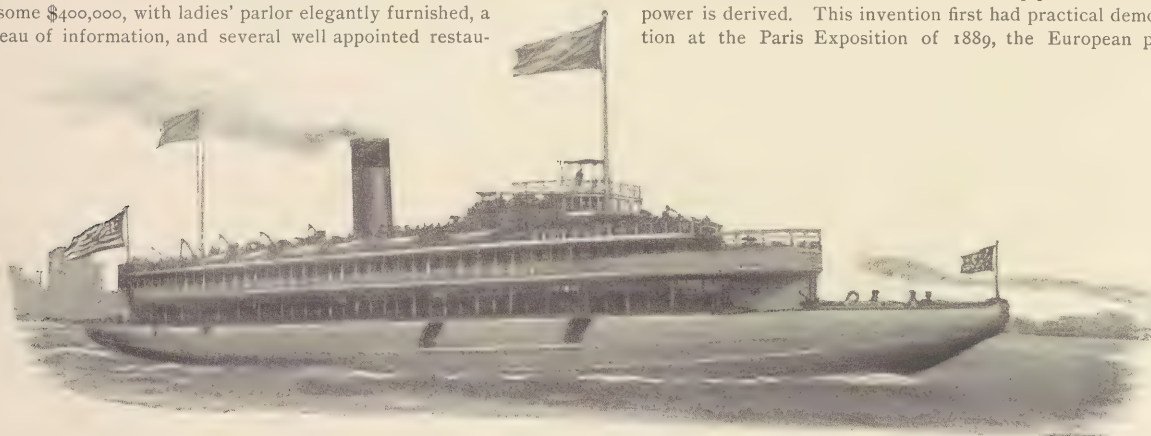
WORLD'S FAIR MISCELLANY.—In the Transportation department power was furnished by electricity or compressed air for the operation of machinery; but the use of steam was avoided as far as possible; nor were any lines of shafting erected within the building. As a precaution against accident, all exhibits of machinery in motion were enclosed by a railing.

Included in the railway division of this department is the terminal station, with its 30 lines of track, erected at a cost of some \$400,000, with ladies' parlor elegantly furnished, a bureau of information, and several well appointed restau-

rants. A special feature is a series of 24 clocks placed upon the walls of its rotunda, whereby the visitor may ascertain the hour of day at as many of the great cities of the world. The clocks are regulated by United States observatory time.

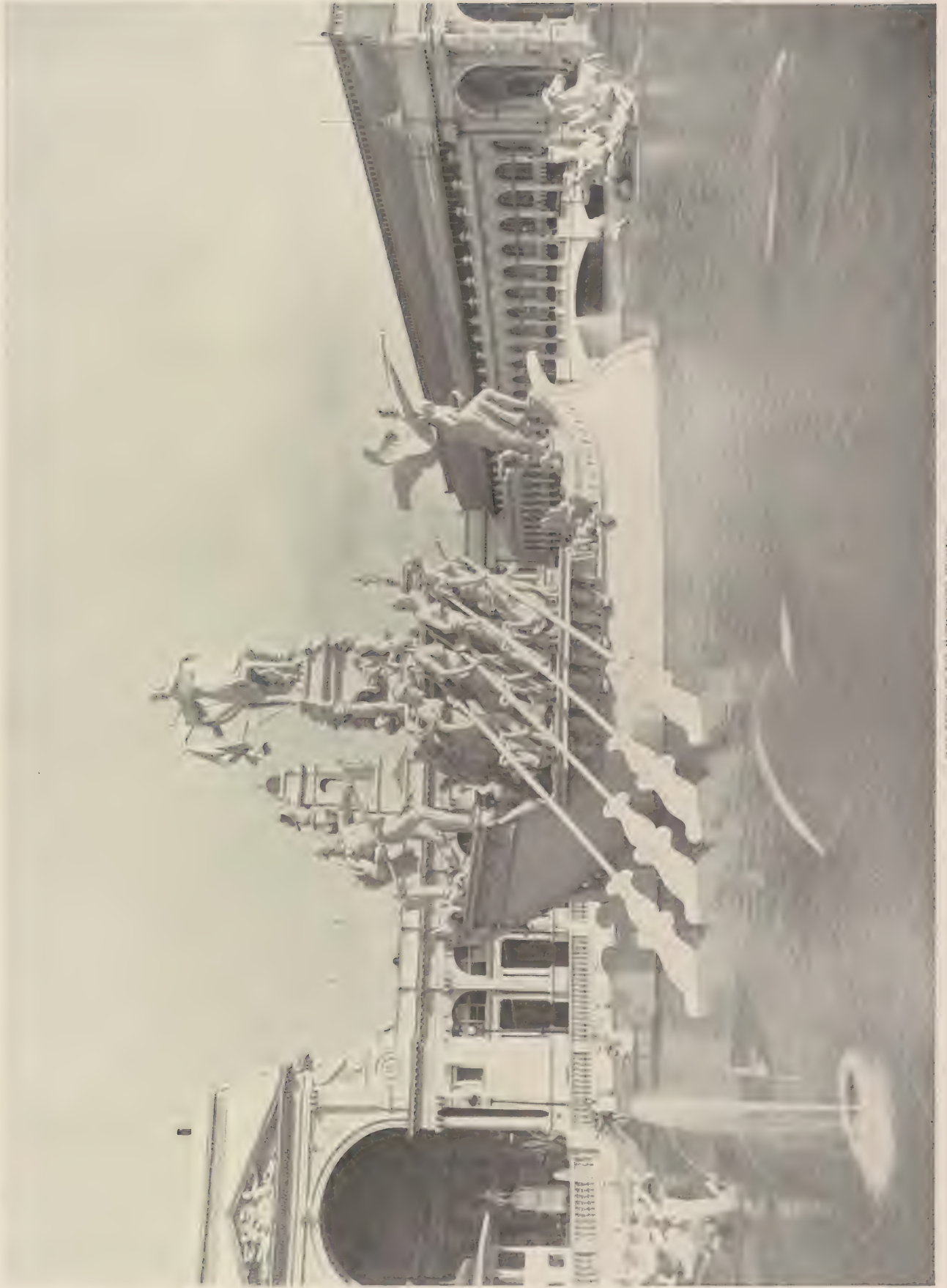
The intramural or elevated electric road, operated within the Exposition grounds, is also included in this department. In its power plant are the great dynamo and engine described in the chapter on electricity. Its system is about six miles in length and the circuit is made in less than half an hour, affording an excellent view of the external features of the Exposition. The intramural road, it may here be stated, cost \$1,000,000, and though carrying nearly 6,000,000 passengers during the term of the Fair resulted in a heavy loss.

Along the south side of the Midway plaisance is another elevated road, which is also considered as a portion of the Transportation department. Its cigar-shaped cars travel at a high rate of speed, being provided with runners or shoes, and propelled by turbine motors. Not only is water the motive power, with a pressure of about 150 pounds to the square inch, but the cars slide upon a film of water which issues from a small pipe behind each shoe. The rail covered by the water film is about eight inches wide, and beneath the track is the main pipe from which the power is derived. This invention first had practical demonstration at the Paris Exposition of 1889, the European patents



WHALEBACK STEAMER "CHRISTOPHER COLUMBUS"





Fontaine de la Mémorie, Paris.



being controlled by Prince André Poniatowski, who claims that his system will work a revolution in the domain of transportation.

A much frequented portion in the marine division of the United States was that of the American Steam Barge company, of West Superior, Wisconsin, builders of the new style of steamer known as

tapering from the middle toward the bow and stern; and the ends of the cylinder lifting high out of the water like a birch-bark canoe. The vessel was lighted throughout with electricity and elegantly furnished, the grand saloon containing several fountains and large aquaria filled with lake fish. Besides conveying passengers from the



"WHITE STAR" PAVILION NEAR WOMAN'S BUILDING

city to the Exposition, the *Christopher Columbus* made several excursions to Milwaukee and neighboring ports, upon which occasions it proved itself the fastest boat on the lakes.

By the World's Fair Steamship company 1,758,665 passengers were carried during the Exposition season, and almost as many by the steam and electric launches and gondolas plying on the water-ways within the grounds, the entire

travel by water exceeding 3,000,000. No accidents were reported.

Scattered throughout the Transportation building are various exhibits of pneumatic tubes, overhead tracks, etc., designed for the conveyance of money and packages in large business establishments, and in the annex is pneumatic machinery for carrying grain.

the Whaleback. When the first of the class appeared upon the lakes it was the subject of much ridicule, but soon it demonstrated its capacity for speed under all conditions of wind and weather. At the Fair the Whaleback representative was the *Christopher Columbus*, its steel cylinder-like body being more than 360 feet in length,



INTRAMURAL ELECTRIC CARS





SECTION OF STATE ROOM "WHITE STAR" LINE

Elevators, whether in actual service or on exhibition, are included in the transportation department, some of them being run by steam, some by water and others by electricity. Among the miscellaneous exhibits installed in the annex may be mentioned the great steam shovels for dredging and the continuous chains of buckets for

hard wood, and contains reception rooms for the public and private offices for the company, and upon the outer walls are photographs of the works at Bay City, and of the cranes, pile drivers, wrecking cars, and railway appliances manufactured by the company. In the out-door space are several massive pieces of hoisting apparatus used in the installation of exhibits. In this vicinity is also an exhibit of what are known as Pintsch gas buoys.

In addition to Siemens and Halske's exhibit of safety apparatus for railways, several American manufacturers show ingenious appliances of this description. The Johnson Railroad Signal company, of New Jersey, has a large pavilion constructed of the various apparatus employed in the Syke block system for grade crossings. Another company illustrates in a model a similar system in which no movable apparatus is located on the road-bed or other exposed place.

Near the lagoon, north of the Horticultural building, is the pavilion of the White Star Steamship line, reproducing, as far as possible, the outlines of an Atlantic steamer. It has two decks, with the familiar rail and netting, the latter hung with life buoys bearing the names of the company's fleet. Side lights take the place of windows, and on the decks are comfortable seats and chairs. The exterior coloring is of buff or cream and the gilded dome is surmounted by a five-pointed star and lighted by electricity at night. The interior affords an idea of the comforts and luxuries of the White Star service. In the centre are models, under glass, of its vessels, and near the main entrance a large

chart showing the tracks of the company's fleet. Small models of the different boats are moved daily along their special routes, locating them approximately according to the reception of official reports.

On Transportation day, the 9th of September, a naval parade was held on the lagoon, in charge of A. C. Baker, superintendent of the



MOVABLE SIDEWALK AND PIER

carrying water and semi-liquids. The largest steam shovel in the building, exhibited by a Bucyrus, Ohio, company, is used as a pavilion, and is well adapted to the purpose.

In the southeastern corner of the annex, and extending outside of it, is the exhibit of the Bay City Industrial works, of Michigan. The pavilion, which is within the building, is finished in light

marine division of the department. Modern yawls, Turkish craft, boats in the government service, Norwegian fishing smacks, Indian canoes, and craft from Ceylon, Egypt, Venice, Brazil, and other nations passed in picturesque review. Then came aquatic sports, and in the afternoon the agents of transportation by land were marshalled by J. G. Pangborn, secretary of the American exhibitors' association.



There were brute and human carriers and vehicles of curious patterns, typical of many eras and nations. The engine *John Bull* was pressed into service, and many crowded into the old-fashioned coaches attached to it for a ride on the tracks of the terminal station, where these relics of early American railroads are on exhibition.

The operations of the Pullman Palace Car company were started, as I have said, in Chicago, and so rapid was the growth of its business that shops were soon afterward established in St. Louis, Detroit, Elmira, and Wilmington. But even these could not keep pace with the demand, which could only be supplied by the erection of works on a larger and more comprehensive scale than any before attempted. Chicago, as the railroad centre of the continent, appeared

used more than 50,000,000 feet of lumber and 85,000 tons of iron a year. At the construction shops there could be built, within a twelve-month, 12,520 freight cars, 313 sleeping cars, 626 passenger cars, and 939 street cars, which, if coupled together, would form a train 100 miles in length. The number of miles run by Pullman cars during the year ending July 31st, 1893, was 206,453,796, the longest unbroken run being from Boston to Los Angeles, California, a distance of 4,322 miles.

The 16th of September, the date on which the Manchester and Liverpool railway was opened sixty-three years before, was selected as railroad day by the Exposition authorities. Many prominent railroad men from the United States and foreign countries partici-



MODEL OF PULLMAN

to be the most suitable location; but to this there were weighty objections, which need not here be mentioned. Thus it was that George M. Pullman looked about him for a spot that would fulfil all the requirements of his constantly expanding business, and this he found near the shore of Lake Calumet, some fourteen miles from Chicago. Here he purchased a tract of 3,500 acres, now included within the city limits, whose suburbs are already encircling its borders. Such in brief is the origin of the town of Pullman, the most thriving of all our young western settlements, with its eight miles of paved streets, its handsome business blocks and residences, with modern appliances for comfort and sanitation, with churches, school-houses, and libraries, and a cosy theatre tastefully upholstered and equipped, all planned with symmetrical unity of design, amid stretches of lawn and park and bordered with flowers of brilliant hue, the home of one of the most prosperous and contented communities in the world, and the more so that it has not a drinking saloon

pated in the exercises and recreations, which included a trip on the intramural road, the movable sidewalk, and the historic pioneer train drawn by the *John Bull*, with a tug of war between an electric and a steam engine, the steam locomotive, though only an old switch engine, easily dragging its competitor along the track. The exercises, which were held in Festival hall, were largely attended, and included the usual feasting and speech-making.

On her westward trip the *John Bull*, with her two primitive coaches, left New York at 10 A. M. on the 17th of April, arriving at Chicago, after a triumphal procession, on the afternoon of April 22d. The engine was run as swiftly as its condition would allow with its wheezy boiler and rusty apparatus, followed by a special train of officials and journalists, and passing at times between throngs of enthusiastic spectators, waving hats and handkerchiefs as the time-worn relic went snorting past, with warning note of bell, resembling the sound of a dinner gong. The engine kept excellent time, though rumbling awkwardly over the rails and swaying to and fro like a vessel rolling in the trough of ocean. The tender is within two feet of the furnace door, and upon it is an odd-looking contrivance shaped like a poke bonnet, and called the gig top, where the forward brakeman sat, keeping a sharp lookout for other trains. The *John Bull* was driven by the same engineer who handled the locomotive forty-two years ago, and, as he said, "obeyed the lever as if her joints were not worn with age and stiff with rheumatism."

Of the Murdock engine, invented in 1784, as mentioned in the text, the following story is told in an English publication of many years ago. Murdock's experiments were conducted by night, near the Cornwall



UPPER DECK STREET CAR

within its limits. By the Palace Car company there is distributed in all nearly \$150,000 a week as the wages of 15,000 employes; and of the 6,300 operatives engaged at its works at Pullman, a large proportion have homes of their own, while the Pullman Savings bank has \$630,000 to the credit of 2,000 operatives. At these works there are

town of Redruth. Returning late from a visit to his flock, the pastor of this parish was suddenly confronted by a fire-breathing monster advancing furiously upon him. He sprang aside, and before the demon could turn upon him had run such a distance that, as it seemed, his fervid prayers for deliverance had been





HOISTING THE KRUPP GUN FROM THE SHIP

answered. Still he ran, however, and presently came full butt against a man running in the opposite direction.

"Back! back!" he cried. "Run back for your life!"

"Have you seen my engine?" asked the other.

"I've seen the devil! Run! run!"

"How far away is he?"

The stranger's tone was somewhat reassuring; and bethinking him that he of all others should have courage to face the evil one, the worthy pastor turned back with his companion, who, it need not be said, was William Murdock. Soon they found the engine, which had run into a ditch, snorting and roaring in terrific fashion, and thence, to the astonishment of the parson, was dragged by its artificer.

Before being stationed among the exhibits of the New York Central railroad the engine 999 was attached to various trains to test her speed. On the 9th of May, while running on the Empire State express from New York to Buffalo, it is claimed that she made the last 69 miles in 68 minutes, making one of these miles in 35 seconds, and on another occasion, as mentioned in the text, a mile in 32 seconds. These figures are not official; and while there is no reliable evidence that this or any other locomotive ever ran at the rate of over 100 miles an hour, it is probable that the 999 has attained about the highest speed on record.

To test her speed and capabilities, the *Greater Britain*, sister engine to the *Queen Empress* in the London and North-Western company's section, was run for six days in succession between London and Carlisle, attached to some of the heaviest mail and express trains, their average weight, including engine and tender, exceeding 237 tons. The total distance travelled was 3,588 miles, and the time 75 hours and 17 minutes, or an average of nearly 48 miles an hour. The fastest runs were between London and Crewe, 158 miles in 3



A NEAR VIEW OF THE MOVING SIDEWALK



hours and 8 minutes, or a little over 50 miles an hour. This is probably almost as good time as will be made by the Empire State express, when on regular service, notwithstanding the exaggerated accounts that have been published. Fifty miles an hour is in fact about the limit of speed, with due consideration to wear and tear of road-bed and rolling-stock.

Of the capture and recapture of the locomotive *General*, exhib-

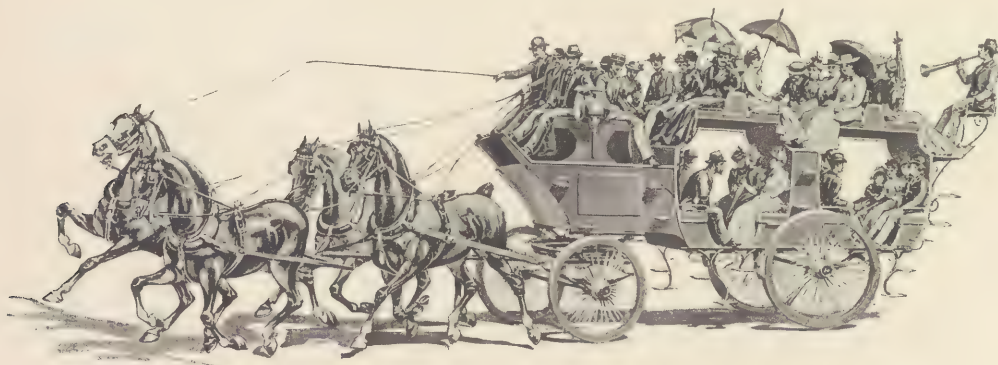
between Atlanta and Chattanooga. Disguised as Kentuckian farmers on their way to join the confederate cause, they reached Marietta early on the 12th of April, 1862, and there boarded the train for Chattanooga. At the next station the train stopped for breakfast, and there the attempt was made, though close at hand was a confederate camp, with sentries pacing to and fro. While the driver and conductor were taking their meal at the station, the raiders



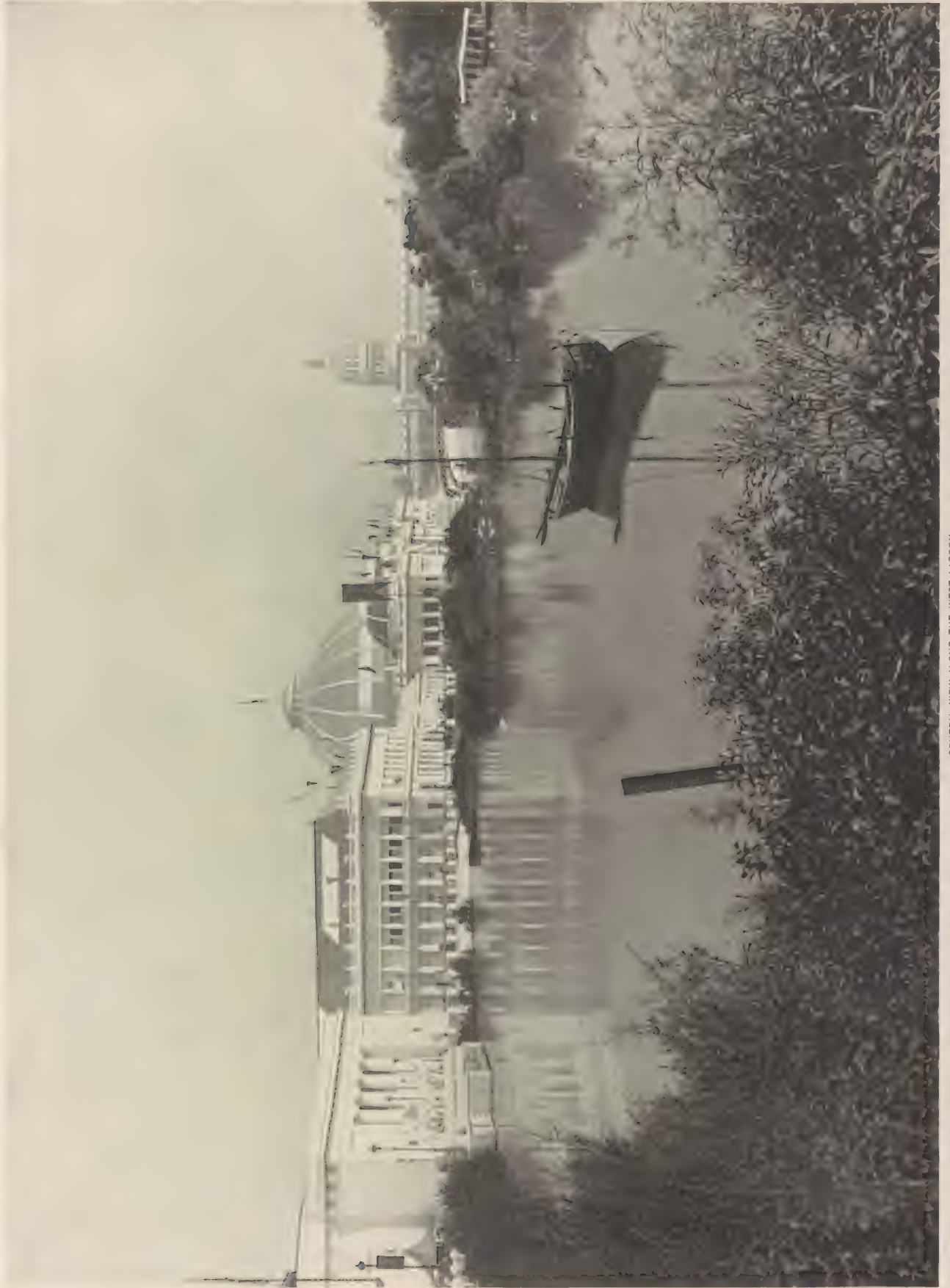
ELECTRIC BOAT IN PROCESS OF CONSTRUCTION

ited by the Nashville, Chattanooga and St Louis railroad, the following is briefly the story: Soon after the battle of Shiloh General Mitchell was laying his plans for the capture of the confederate stronghold at Chattanooga, and for that purpose it was necessary to cut off railway communication with Atlanta. The task was undertaken by Captain Andrews and a chosen band of federal scouts, their object being to capture a train on the Western and Atlantic line, and burn the bridges

uncoupled all but the foremost car, and a moment later were speeding northward with their prize. Then followed "the great locomotive chase" which history records, Andrews and his men being hotly pursued and finally driven to the woods, where they were pursued with bloodhounds and captured, eight of them, including the captain, being executed as spies.







GENERAL VIEW ALONG THE WEST LAGOON



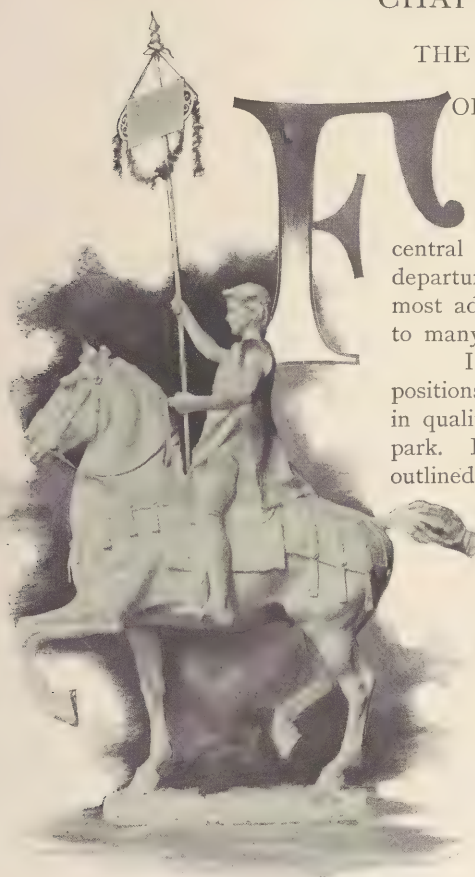


## CHAPTER THE NINETEENTH

### THE LIVE-STOCK DEPARTMENT

**F**OR the information of those who are interested in the Live-stock exhibits, a few remarks may be in place as to their origin and organization. Like all other features of the Fair, architectural, industrial, or artistic, there has here been a departure from the preconceived idea that anything intended to be a success must be absolutely controlled by a central head. The entire plan of the Columbian Exposition was itself a departure from this popular theory, and represents in all its branches the most advanced ideas of men possessed of the highest order of ability, directed to many phases of human endeavor.

In all previous live-stock exhibits in connection with international expositions, while many have been on an extensive scale, there were none that in quality or variety would bear comparison with the one held in Jackson park. For this the main reason is that the general scope of the display was outlined by the representatives of all the great live-stock associations of the United States, about seventy in number. When it was determined by the officials of the Fair to make live-stock one of its features, they solicited the coöperation of all the more prominent breeders, and with the result that these associations met in convention and a committee was formed to take charge of everything pertaining to the exhibit, its preliminary preparations, classification, premium lists, plans of buildings, and in a word to represent, in the discharge of its functions, the live-stock associations of the United States. From the beginning until the end, this committee has worked in perfect harmony with the Fair officials, and through their efforts it was brought about that a separate department was organized and a chief placed at its head. This segregation gave to it special prominence and had a marked effect upon foreign countries as well as





among the states. A special effort was made to secure coöperation with similar enterprises in Europe, through which the governments of European countries were brought into participation, for thus might they develop an increased demand for their stock. Especially were the Russian, the German, and French governments induced to make an elaborate display, not only bearing the entire expense, but offering large subsidies to exhibitors, though the Canadian government expended more money and made a larger exhibit than any of the foreign participants.

State exhibits were also stimulated by the appropriation of large amounts, and state pride as well as the emulation of exhibitors was encouraged to its fullest extent, Illinois heading the list in the contribution of funds



SECTION OF GRAND BASIN, WITH COLUMBUS QUADRIGA IN THE DISTANCE

and number of animals on exposition. Provision was made for showing about 3,000 animals at a time, first horses and cattle, then sheep and swine, followed by poultry. The highest types of the various breeds were collected; but surpassing all the rest was the display of horses, with thirty different breeds, all with established pedigrees, presented for inspection.

As an aggregation of all the principal breeds of live-stock in the civilized world, it is conceded that never before has this collection been approached. All that money and an appeal to the breeder's pride could do was done, and the result was a matchless display. The Russians sent their finest specimens, and, under the direction of the tzar, animals from his own stable were included in their collection, his brother, Count Demitry, also supplying a liberal quota. But the Germans entered into the competition more heartily than any European nation, a most energetic contest for the supremacy of the various German breeds making itself felt at an early date, and continuing unto the end. The largest number and one of the best collections were those of French blood, which numbered nearly one fourth of all the exhibit of horses. The next in number and quality were the British breeds, and without a doubt, the finest types of all countries were included in this exposition. One of the most significant features from the American breeders' point of view was the choice assortment of females, this meaning that the best species have been transplanted to American soil; so



that in future we shall not depend on foreign countries for the most useful and valuable varieties of live-stock.

Another feature in this department was the magnitude of the interests which it represented, the value of all farm animals in the United States being estimated in 1893 at \$2,500,000,000, with 1,350,000 square miles of territory devoted solely to the raising of cattle, mustering at that date about 54,000,000 head. Of horses the number may be stated at 15,000,000; of mules, 2,500,000; of swine, 55,000,000, and of sheep, 47,000,000, with a wool clip of 300,000,000 pounds a year, and dairy products that find their way to market worth at least \$15,000,000, while as to the value of such products raised for domestic consumption there are no reliable data.



TYPICAL AMERICAN-BRED STALLION

It is probable that our live-stock industries, as exemplified at the exhibition, exceeded in value those of all foreign participants combined. In Great Britain and Ireland, with half our population, the area available for pasturage is less than four per cent, and the number of animals, except for sheep, not more than fifteen per cent of the figures estimated for the United States. In France and Germany the number of farm animals may be stated at 50,000,000 for each, or about the same as in the British isles; Russia has perhaps twice as many, and adding to these a few millions for the dominion of Canada and other countries here represented, we have a total of some 260,000,000 against nearly 200,000,000 for the United States, the difference in number being more than compensated by a higher average of prices. Some of the largest stock-raising countries in the world sent no exhibits to the Fair, as the Australian colonies, the South American republics, and others whom distance debarred from participation.

Cattle farming has ever been a favorite pursuit in the United States, and in few industries have so many large fortunes been made, often on the smallest modicum of capital. While within recent years profits have been greatly curtailed by the encroachments of husbandry, coupled with drooping prices, the business is still of large proportions in all the more sparsely settled regions westward from the Mississippi river to the Pacific





READY FOR INSPECTION

ocean and southward from the upper Missouri to the gulf of Mexico. Vast herds and ranges are as numerous as ever, and especially on the Pacific coast, where single firms and individuals own 20,000 to 30,000 head, with lands of larger area than many a European principality.

As to breeds, the preference in money value is given to short-horns, a stock imported from England at least as early as 1785. But, as I have said, we no longer depend on foreign countries for this or any other variety of cattle. To-day the American short-horn has no superior, and not a few of our choicest animals have even been exported to Europe for breeding purposes. As beef cattle, for milking purposes, and for heavy farm work, they are much in favor, while also largely used for improving the grade of native stock. The Hereford is an excellent beef producer, and, as a milker, the Ayrshire ranks second only to the Alderney, the former being prized for cheese-making and the latter for the making of butter. So also with certain of the Dutch and Scotch breeds, the polled Angus

and Galloway especially gaining in favor as among the hardiest of stock and the choicest of beeves and milkers.

Of horses the exhibit ranged from the hugest of draught animals to the smallest of Shetland ponies, with all the more prominent varieties valued for power or speed. The heavier draught-stock still consists largely of the offspring of English cart-horses, though greatly improved in breed. The Clydesdale is also a favorite animal, and for a strong and showy coach-horse the Cleveland bay is gaining in favor. The Norman, with his sturdy limbs and massive neck and shoulders, is valued for strength and endurance, especially the Percheron, in which is probably a tempering of Andalusian blood. The Conestoga, so called from its native home in the valley of that name, is supposed to be of German origin, and is the only variety peculiar to the



JUDGING THE CLYDESDALES





A TRIO OF CLYDESDALES

United States. It is a large and muscular animal, sometimes exceeding seventeen hands in height, and with the build of an English dray-horse, though lighter of limb and less encumbered with flesh.

The trotting-horse is the most distinctive of American breeds, with gait and pace unrivalled elsewhere in the world. Here is probably no particular strain, but rather the result of breeding from the choicest specimens and of constant practice on suitable roads and tracks. Certain it is that our best trotters have come from various stocks, as the Morgan, the Canadian, and the English thoroughbred; but all the best types are distinctly of home development, carried to a point with which there are none to compete. It is not many decades since a 2:40 horse first made his appearance on the turf; in 1870 a speed of 2:30 was almost unheard of, and when, a few years later, Maud S. covered her mile in 2:08 $\frac{3}{4}$  and her half mile in 1:03 $\frac{1}{2}$ , this record was the wonder of the sporting world. Yet it is predicted that among the wonders of the nineteenth century will be the trotting of a mile within two minutes or less.

As to the exhibits of sheep a word may also be said by way of introduction; for here is represented a most important branch of industry, especially in the far west, where alone can be had a natural food supply

sufficient for extensive herding. The bunch and other grasses of the plains and foothills are excellent pasturage, and when cured as hay, will keep the flocks in good condition during the winter season. Alfalfa can also be profitably raised for the purpose, at least for the choicer breeds, while for the greater part of the year the sheep is self-supporting, eating that which no other animal will eat, clearing the ground of weeds, and otherwise serving as a scavenger.

"England," it has been said, "is a mutton and the United States a wool country;" for the raising of a superior grade of wool does not consist with the production of finely



AN ARRAY OF PERCHERON BEAUTIES



flavored meat. The merino, with its average fleece of four or five pounds and at times as much as a score of pounds, is here the favorite variety, and of this with its cross breeds consist at least 80 per cent of our flocks. The Southdown and Cotswold have been largely imported, more for their mutton than their wool, though the latter is of merchantable quality and with abundant clip. The Leicester is also valued for carcass and fleece, with wool of long staple but deficient in certain qualities. Among others are the Cheviot, Lincoln, Dorset, Shropshire, Hampshire, Spanish and Saxon merinos, the last from the original offspring of Spanish stock imported into Saxony as early as 1765. Except in Vermont, where perhaps are the choicest of American flocks, there are few whose blood is entirely pure, this not altogether the result of carelessness but at times with a view to combining the benefits of various strains. On the Pacific slope, where is more than one half our supply of sheep, Spanish, Australian, and American breeds have been blended with fair results, and here, until the progress of settlement absorbed the more valuable ranges, sheep-farming was the most steadily prosperous of all the western industries.



GERMAN COACH HORSES

For the conduct of the live-stock exhibit excellent regulations were framed by the chief of the Live-stock department. Exhibitors must have been the owners of animals intended for display for at least sixty days before the date of application, and must furnish a copy of the certificate issued by the association in whose register the animals were entered. Any misrepresentation would subject the exhibitor to the forfeiture of his rights and the exclusion of his exhibits. No vicious or fractious animals would be admitted, and all animals from foreign countries would be subject to quarantine regulations. Participants must furnish their own attendants, who would be required to obey the rules, to keep thoroughly clean the stalls and the grounds adjacent, under penalty of instant expulsion. A veterinary surgeon was appointed, whose duties included a thorough examination of the animals, before being admitted at the gates, with a daily inspection and report to the chief, the right being reserved to remove without notice all sick or dangerous beasts.

The Live-stock buildings are in the southern portion of the grounds, where a spacious tract is covered by a number of plainly constructed barns and by a circular pavilion somewhat resembling the colosseum. The latter lies south of the court of the obelisk, is 380 feet in length by 250 in width, and while not more than one third as large as its Roman prototype, is sufficiently commodious for the purposes for which it was designed. In the ten tiers of seats contained in the amphitheatre there is accommodation for 10,000 visitors, with access through four main entrances and eight smaller ones. The structure is roofed with iron, the show-ring being uncovered, and though of massive appearance, the grayish-white walls are of staff. Opening into the surrounding avenues are the offices of the live-stock commission and the headquarters of various journals which are organs of the agricultural classes. Here also is a bureau of information and a well appointed restaurant.

The judges' stand was erected in the centre of the arena, their duties commencing after the animals had been exercised for two hours in the ring, the continual process of examining, judging, and the announcement of decisions being enlivened by music and tests of speed among horses of various breeds and nationalities.

Most of the sheep, hogs, and other small varieties of live-stock were examined by the judges within or near the barns reserved for them, the pavilion being specially built for the display of cattle and horses which



A PRIZE ANIMAL



were driven to it almost daily from about the middle of August to the middle of September. On the 25th of the latter month swine and sheep entered the contest, occupying the barns which had been vacated by the larger animals. During the season poultry had also their day, while toward the end of October the leading breeders of the lighter grades of horses in the United States and Canada, comprising the thoroughbred, trotting, and coach varieties, organized an elaborate exhibition. Included in the display of horses were jacks and jennets, angora goats, of which there was a large collection, forming a class of themselves. Thus it will be seen that



the Live-stock department, like several others of the Fair, was a shifting panorama, and is better described in the form of a narrative than in the present tense.

The first exhibits forwarded to Jackson park consisted of a band of Morgan horses and a herd of cattle from Vermont, these being followed soon afterward by Canadian thoroughbred horses and cattle, of which nearly sixty car-loads arrived in a single day. A week or two later there were on the ground 1,200 head of cattle and 800 horses. As to the extent and variety of the display, with the relative participation of states and nations, a brief description is afforded in the official statement reproduced in the note subjoined.<sup>1</sup>

The display of horses opened with a competition among those of the Suffolk Punch breed, so called from their compactness of form and from the English county where they have been raised for many centuries, though probably of Scandinavian origin. At one time this stock was coarse in form and slow of pace, but of late has been much improved, and nowhere more so than in the United States, now ranking among the most valuable of draft horses and one that takes kindly to the yoke. In this class the honors fell to Peter Hopley and company, of Lewis, Iowa, to whom were awarded 17 out of the 21 first premiums offered. Blazer was pronounced the best stallion of his breed, and Bragg the finest mare. In addition to money awards, gold medals and silver cups offered by American and British associations, were captured by this firm.



FROM THE IMPERIAL RUSSIAN STABLES

The exhibit of Suffolk Punch horses was followed by a choice display of French Percherons within the pavilion, and a brisk competition for honors. There was a large number of competitors, and the extent of territory from which the animals were drawn was very broad, embracing as it did Illinois, Minnesota, Wisconsin, Michigan, Iowa, Nebraska, and Canada. In the final division of honors, twelve first premiums fell to M. W. Dunham, his large contingent of Percherons coming from the Oaklawn farm, at Wayne, Illinois.

<sup>1</sup> LARGE BREEDS OF CATTLE: Shorthorns, 233; Herefords, 140; Aberdeen Angus, 72; Galloway, 78; Devon, 71; Holstein, 67; Red polls, 70; Polled-Durham, 30. SMALL BREEDS: Jersey, 243; Ayrshires, 129; Guernseys, 49; Brown Swiss, 54; Dutch belted, 16.

HORSES AND MULES: Clydesdales, 187; Percheron, 155; Suffolk Punch, 21; Shire, 49; French draft, 94; Belgian, 67; Arab, 6; American Arab, 17; Thoroughbred, 26; Cleveland bay, 48; French coach, 63; German coach, 92; Hackney, 32; Morgan, 66; jacks and mules, 49; saddle, 46; Standard trotter, 45; Russian trotter, 18; French trotter, 23, and Shetland pony, 85.

Of state and Canadian entries the following was the proportion. HORSES: Illinois, 220; Iowa, 137; Michigan, 75; Wisconsin, 74; Minnesota, 64; Canada, 55; Vermont, 50; Indiana, 46; Missouri, 42; New York, 39; Kentucky, 36; Nebraska, 18; Tennessee, 4; West Virginia, 3, and one each from Ohio, North Dakota, Kansas, and Pennsylvania.

CATTLE: Canada, 234; Illinois, 172; Minnesota, 154; Ohio, 99; Missouri, 83; Indiana, 78; New York, 67; Pennsylvania, 59; Iowa, 59; Vermont, 49; Kansas, 42; Nebraska, 42; Kentucky, 33; Michigan, 17; Maine, 13; North Dakota, 10; Massachusetts, 1.



His stallion, La Ferte, was the winner of the first prize, strengthening the position reached some years before, when in competition with the Clydesdale and Shire breeds, he won the championship as the best draft stallion of any variety.

In the above competition it was observed that Minnesota received many of the second premiums, and at the ensuing tests between Clydesdales this state was *facile princeps*. Many of the first premiums fell to N. P. Clark, of St Cloud, and included those for the best stallion bred in Scotland, the most valuable mare bred in Scotland or America, and the finest of either sex upon the grounds. His strongest competitor was Robert Halloway, of Alexis,



SHETLAND PONIES OF IOWA

Illinois, who, besides taking several first premiums, was adjudged to possess the most valuable stallion bred in America, the prize being given by the Clydesdale society of Great Britain and Ireland.

That Shires and French draft horses thrive well on the prairies of Illinois was evident from the appearance of the animals which next entered the arena. With few exceptions they were raised in that state, the draft horses from the Oaklawn farm showing that here was as successful a breeding ground for this class as for the Percherons, while Burgess brothers, of Wenona, took the prize as Shire breeders. The Shire, it may be remarked, is the largest and most powerful of all English horses, claiming as his progenitor the mail-clad war-horse of ancient times. He is now used for the heaviest kinds of work, as for ploughing, and hauling such cumbersome articles as steam-engines, threshing-machines and brewers' drays. His Scotch brother, the

Clydesdale, is nearly as large, and though somewhat quicker in action, is mainly used as a cart or dray-horse.

On a special occasion Clydesdale, Shire, Percheron, French draft, and Belgian horses were in the ring at one time, with Russian horses driven under saddle, and Shetland ponies, single, double, tandem, four-in-hand, and four abreast, thus bringing home to spectators that even in the matter of live-stock they were attending a world's fair. The cosmopolitan nature of the exhibit was further emphasized by the appearance of several beautiful animals of the Arabian



A TENNESSEE TWO-YEAR OLD



and American-Arabian breeds, for which three of the exhibitors had won the highest premiums, Jacob Keyl, of Milwaukee, for both classes, M. W. Dunham, of Wayne, Illinois, and J. B. Hall, of Toronto, Canada, for those of mixed breeds. This was considered Iowa's special day, the state band furnishing the music, the state itself supplying nearly all the Belgian horses, so much admired, while to Van Volsen brothers and A. B. Holbert, of Greeley, fell the honors awarded to Iowa's exhibits.

A few days later, W. J. Buchanan, the chief of the Agricultural and Live-stock departments, marshalled the prize-winners and those who were still to be honored, for a parade through the Exposition grounds. Moving from the stock pavilion, a detachment of Columbian guards was followed by the Iowa state band, and by the chief in person, driving a noble looking animal. Behind him came a string of tiny Shetland ponies, whose reins



ROY WILKES, A FAMOUS AMERICAN STALLION

were held by boys and girls, followed by Russian horses, American riding horses, German and French coach-horses, native and French trotters, Morgans from Vermont, Arabian steeds, Clydesdales, Percherons, French draft, Shires, Belgian, and Suffolk Punch horses. Most of them were led by grooms in native costume, and where honors had been awarded, the bright premium ribbons fluttered from their heads—blue for first prizes and red for the second. Thus 600 of the finest animals ever gathered together passed through the principal avenues of Jackson park between serried lines of spectators, and here was in truth a collection, culled from every quarter of the world, which taken in its entirety has never before been equalled in the annals of show-yard exhibitions.

The closing days of September were mainly devoted to the famous English breed of Cleveland bays and the coach-horses of France and Germany. The coaching horse of England and the Cleveland bay are almost identical, and now are used for the plough, for heavy carriages, and for slow driving. In the latter class most of the entries were by Illinois breeders, who captured nearly all the first and second premiums, the majority of the prizes falling to Stericker brothers, of Springfield, and George E. Brown, of Aurora. As to the French coach-horses, the most extensive exhibit was made by the Oaklawn farm of Illinois, the competition increasing the number of its prize animals to a total of 111. Its entries of Percheron and French coach-horses mustered in all 500, the animals which were exhibited in a special building forming an additional attraction.



Alluding to the entire exhibit of French coach-horses, the judges make the following remark in their report to the bureau of awards: "Surely the grand and unequalled specimens of the equine family found in this



SECTIONAL VIEW OF AGRICULTURAL BUILDING

department were all the most enthusiastic admirers of the breed could desire or hope for." In this exhibit no less than 68 animals came from the Oaklawn farm, and to these were allotted 49 first prizes, including sweepstakes and awards of honor, five of them being also winners of first prizes at the Paris Exposition of 1889. Among the latter was the chestnut stallion, Indre, who in the front rank of the parade attracted general attention by his stately carriage and bold, powerful step. So also with the bay stallion, Perfection, a carriage horse of remarkable beauty, with long but graceful curve of neck, lofty bearing, easy movement, and form as powerful as supple. In his offspring, descended through ten generations of ancestors without a flaw in pedigree, was also noticed his own tenseness of nervous organization. Other first prize stallions were Lord, a four year old bay; Urban, a two year old chestnut of perfect symmetry, style,

and action, and Monaco, a two year old bay, with all the force and more than the stature of his sire, Indre. In the second line was the black stallion, Aguadel, a rival of Indre in the class of aged French trotters, and with him a number of mares and of colts and fillies of which 23 prize-winners were sired by Indre and Perfection. There was substantially no contest between French breeders of these famous stocks and American breeders of the varieties originally imported. Of German coach-horses, however, there were many exhibitors from the Fatherland, as well as from Illinois and Iowa. The final result was an almost even division of the honors among the three chief contestants, the advantage, if anything, lying with foreign participants. Ulfert Poppen, of German valley, Illinois, was one of the most successful, and many of the competitors from that state or from Iowa were of his nationality. Thus, while the stock bred on German soil may have had slightly the advantage as to ribbons of honor, it was, in the main, a contest restricted to a single nationality.

The competition among the coach-horses of English, French, and German breeds was concluded during the month of September, after which a week was set apart for hackneys and Morgans, jacks, jennets, and mules, saddle-horses, Russian and French trotters, and Shetland ponies. When all was over, it was decided that the best hackneys were those from Nebraska and Canada, and that Vermont and Kentucky breeders excelled in the Morgan class, but with Illinois and Indiana not far behind. As to mules, jacks, and jennets, the result was in favor of Missouri, though abundant honors were also bestowed on Illinois, Kentucky, and Tennessee.

Among Russian trotters the czar's horses had no worthy competitors, while Dunham once more gathered all the premiums for his French breeds. The picturesque features of the show were furnished by the saddle-horses and Shetland ponies. As the former were put through all their paces, the live-stock arena was converted into a circus ring, the contest



GROUP IN PLASTER NEAR GONDOLA LANDING



being intensified by the forthcoming prize, to be presented by Chief Buchanan himself, in the form of a handsome silver cup. The trophy was awarded to J. T. Crenshaw, of Todd's Point, Kentucky, "Monte Cristo Junior" being the name of the steed.

To children the exhibit of Shetland ponies was one of the most attractive features of the Fair, as also was the group of tents containing a band of Wisconsin ponies. Among the former, about fifty in number, were colts and weanlings, some of them not more than twenty pounds in weight, but "ready," as one of the exhibitors remarked, "to grow up with the children and become useful and companionable." The animals were broken to saddle and harness, the latter either as singles, spans, tandems, or four-in-

hands, and beside them was an assortment of pony carts, with equipments to match. The largest groups were from the Pittsford farms, New York, and from Maquoketa, Iowa, the former displayed by E. F. Hawley and the latter by J. M. Hoag. It was in fact the east pitted against the west, and if the children could have had their way, every pony that entered the lists would have received a ribbon; but the judge was obdurate, awarding one first premium and six of the minor class to the New York collection, with blue ribbons to the stallions of Robert Lilburn, of Emerald grove, Wisconsin, and a mare owned by G. A. Watkins, of Detroit, Michigan. The Shetland and Wisconsin pony shows closed the main series of competitions in horse flesh.

One of the most noted stallions on exhibition was Roy Wilkes, whose record in turf annals consists of one continuous series of victories over such horses as Mascot, 2:04; Guy, 2:06 $\frac{3}{4}$ ; Manager, 2:06 $\frac{3}{4}$ ; Major Wonder, 2:09 $\frac{1}{4}$ ; Riley Medium, 2:10 $\frac{1}{2}$ ; Grant's Abdallah, 2:10 $\frac{1}{4}$ ; Dallas, 2:11 $\frac{1}{2}$ , and Brown Hal, 2:12. He not only

captured the first premium for stallions of five years and over, but holds the world's record, 2:06 $\frac{1}{2}$ , for stallions in a class race, without a runner to prompt. Roy Wilkes has earned the world's stallion record, 2:08 $\frac{1}{4}$ ; the world's record to a wagon, 2:13; the world's record for  $\frac{1}{4}$  mile, 27 $\frac{3}{4}$  seconds and the two fastest heats in a race for a stallion, 2:06 $\frac{1}{2}$  and 2:08 $\frac{1}{4}$ . It is, furthermore, a noteworthy fact that a veterinary surgeon representing the Government department was sent to secure measurements of the animal, and after thoroughly doing his work pronounced the animal a perfect type of the American trotter. Naturally, therefore, the progeny of Roy Wilkes, both pacers and trotters, have shown remarkable speed. The home of this animal is at the Calumet stock farm, in the neighborhood of Geneva, Illinois, and it is described by an admirer "as a dapple seal brown of the richest color imaginable, his coat being as glossy as the finest satin. In height he is 15 $\frac{3}{4}$  hands and weighs in the neighborhood of 1,200 pounds, in bodily conformation reminding one of old George Wilkes. He has a massive neck nicely cut up at the jowl, built on the Patchen line; but there is the broad breast, barrel perfectly ribbed up, shoulders sloping to suit the most fastidious, a back second to none on any race horse, indicating strength par excellence, and the legs of the Wilkes, with wide, flat bone, braced with muscles at every point. His hocks are simply perfection; he has a fine head, perfect



GALLOWAY COW

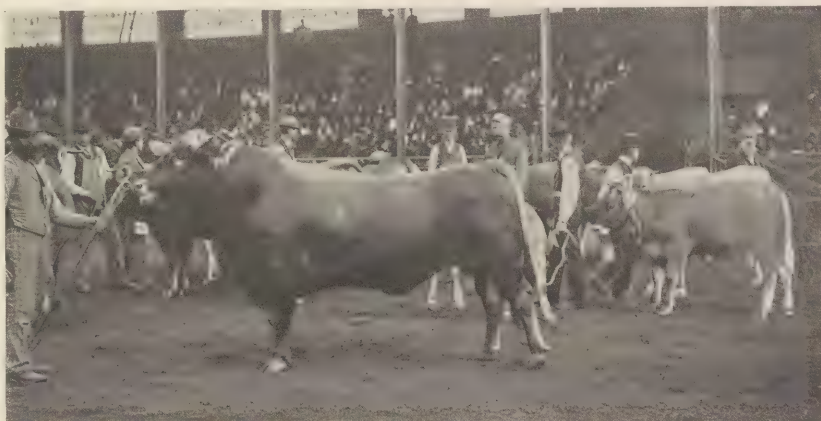


PRIZE BULL AND COW OF JERSEY BREED



muzzle, bright intelligent eyes, a pair of well shaped ears of medium length, and is of the most kindly disposition. Noticeable points in his make-up are his mane and tail, the latter being a waving mass as black as ebony and sweeping the ground. In fact, there is no white upon the entire body except a faint star upon the forehead."

As to the cattle show it will be seen by reference to the official list already quoted that the display of Canadian cattle was much more extensive than that of any of the states, and, as will presently appear, the dominion was rewarded with a large proportion of the highest premiums. The result was the more gratifying to our neighbors beyond the lakes, since nearly all the breeds selected for competition were of British types. Leading the list, in the order of the series, was the short-horn, the best of English breeds, and one adapted to all climes and countries. Next was the red and white Hereford, docile and easily fattened, followed by the hornless Scotch breeds, the Aberdeen-Angus, and the Galloway. The Jersey and her more homely and larger sister, the Guernsey, showed their



SEGMENT OF THE CATTLE RING

best points, and between these exhibits came the famous Holstein-Friesian, of Germany. The well-built Devon, whose production of juicy beef from the scant lands of her native shire is one of the mysteries of nature, was also represented, with the Scottish Ayrshire, famed as a cheese maker. Then there were red polled cattle and polled Durham, hornless as their names imply, with the Dutch belted and the small brown beauties of Switzerland, both suggestive of the dairy house and the cheese press. The tests conducted throughout the Exposition season for determining the value of different breeds for dairy purposes were under the supervision of a separate bureau, and have already been described in connection with the Dairy department.

The exhibition of shorthorns aroused general interest among breeders, Kentucky, Missouri, Indiana, Minnesota, Illinois, and Ontario, Canada, having each a large number of participants. The first premium for the best bull, without regard to age was awarded to T. S. Moberly, of Richmond, Kentucky, whose "Abbottsburn" was pronounced the king of shorthorns. The same breeder took



CHAMPION BULL, TWO YEARS OLD

the first prize for the finest two or three year old heifer; but the best herd was pronounced to be that of H. F. Brown, of Minneapolis, Minnesota, the first premium for cows going to J. G. Robbins and son, of Horace, Indiana. For the most valuable young herd, consisting of one bull and four heifers, all under two years, the first prize was taken by J. and W. Russell, Richmond Hill, Ontario, and for the best cow of any age by J. G. Robbins and sons, of Horace, Indiana.

"Ancient Breton," the property of H. H. Clough, of Elyria, Ohio, was the first prize-winner among the Herefords, while the blue ribbon for the queen of this breed was awarded to "Annabel," owned by W. S. Van Natta, of Fowler, Indiana. In the contest for the most valuable herds, Ohio and Missouri exhibitors were successful, Clough again receiving the highest honors, together with Gudgell and Simpson, of Independence. When the

time came for the Scotch breeds of Galloways and Aberdeen-Angus, it was evident that Indiana, Minnesota, and Ontario were to be prominent in the former, and Missouri, Illinois, and Iowa in the latter. In the Aberdeen-Angus competition most of the first premiums were awarded to Wallace Estill, of Estill, Missouri, and for Galloways to the Brookside farm at Fort Wayne, Indiana, and Hugh Paul, of Dundee, Minnesota. Ontario breeders took a number of minor prizes, those of the first class falling to William Kough, of Owen Sound.

Thus ended the competition between the various breeds of beef cattle, dairy animals being next in order, and first among them, Jerseys. In this class entries were numerous from Missouri, Illinois, and Minnesota;



but, as a rule, the highest premiums were awarded to Pennsylvania and New York. The herd of Jerseys exhibited by T. S. Cooper, of Lehigh county, Pennsylvania, was of excellent quality, taking fully one half of the many premiums offered, the prize for the best cow falling to C. A. Sweet, of Buffalo, New York. Eastern participants also carried away the majority of the honors in the Holstein-Friesian class, especially those from the empire state, the sweepstakes for the best bull going to D. F. Wilber, of Oneonta, New York; for the best cow to C. V. Seeley, North Farmington, Michigan.



THE DAIRY BUILDING

The cattle show closed with the competition among other English and Scotch breeds and the Dutch belted and Brown Swiss cattle for the grand sweepstakes to be awarded according to age and for general merit. Canadian exhibitors were made glad when the premiums were allotted for Devon and Ayrshire cattle, sweeping all before them in the latter class, with Daniel Drummond, of Montreal, as the largest prize winner. For red polled cattle Iowa was in the front, many of the exhibitors coming from that state and nearly all the first premiums falling to J. H. Gilfillan, of Maquoketa. In Dutch belted cattle Pennsylvania was at the head, represented especially by H. B. Richards, of Easton, while all but one of the fifteen premiums for the Brown Swiss breed fell to Abraham Bourquin, of Nokomis, Illinois.

The last days of the cattle show were enlivened by a grand display in the ring of all the cattle exhibited, and a special parade of Canadian stock, the season concluding with the general competition. The sweepstakes for the best herd of beeves was taken by J. G. Robbins, of Horace, Indiana.

Sheep and swine were on exhibition from September 25th to October 13th, about 3,000 head of both being entered. For the best sheep awards were made to exhibitors of Cotswold, Leicester, Lincoln, Cheviot, Dorset, Southdown, Shropshire, Oxford, Hampshire, and merinos, in the order named, Angora goats being



WITHIN THE LIVE-STOCK PAVILION

also included in these classes. The largest number of entries was of merinos, delaine-merinos, Southdowns, and Oxfords. Ohio, Missouri, Michigan, Illinois, and Vermont took most of the premiums for delaines and merinos, Ontario presenting an excellent display of such English breeds as Lincolns and Southdowns. John Jackson and sons, of Abingdon, were the prize-winners in the latter class, and in the group of Angora goats, as also in the special class of

Persian or Astrakhan sheep, C. P. Bailey, of San José, California, won the first and second premiums in all the sections. These beautiful animals shared a building with a large flock of Cotswold sheep, exhibited by a Wisconsin breeder, who captured a number of prizes.





LOOKING UP THE NORTH CANAL





A MONSTROUS PRIZE WINNER

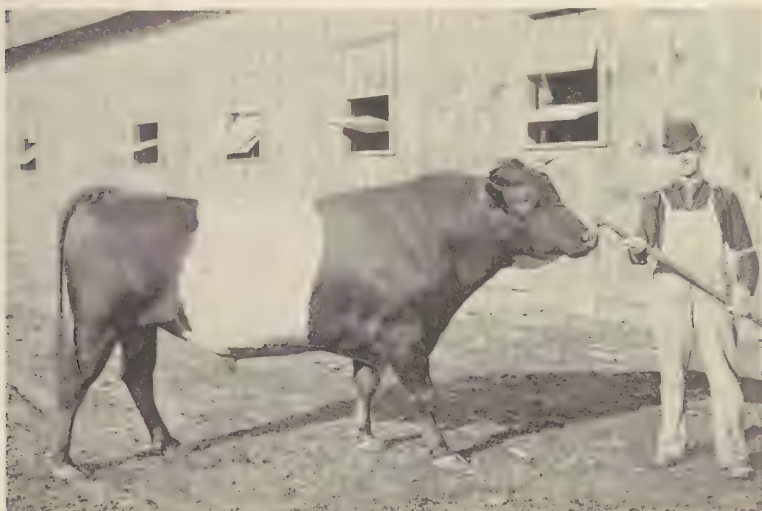
Among the noticeable exhibits of the Shropshire breed was the one made by A. O. Fox, of Oregon, Wisconsin, whose ram, "Kingstone," weighing 350 pounds, took the first prize as the largest yearling on the grounds. Across the way, in the Ontario section, was Newton Lord, a famous Shropshire ram, the English and Canadian prize-winner in former contests, and now the champion of the United States. In another building were the Oxfords, from the Summer Hill stock farm of Peter Arkell, of Teeswater, Ontario, who claims to be the first American importer of this stock. From a

New York exhibitor came the only considerable flock of Cheviots, representatives of the hardy breeds which flourish in the lowlands of Scotland, another participant from the empire state showing several fine specimens of Pomeranian merinos, owned by Baron von Homeyer. Much interest was aroused by the competition for honors among the different breeds of rams, for which a number of valuable prizes were awarded.

Berkshires, Poland Chinas, Chester whites, Duroc-Jerseys, small Yorkshires, and the Essex, Victoria, and Cheshire breeds were the varieties of swine exhibited, premiums being awarded simultaneously with those for sheep. In the



LARGEST STEER IN THE WORLD



DUTCH BELTED BULL

swine division Ohio, Illinois, Indiana, Iowa, and Nebraska were prominent. A famous character among the Poland Chinas was "Black Wilkes," the prize-winning boar, weighing 800 pounds, but as spry as a yearling. He is owned by Taft and company, of Humboldt, Iowa, and has a long list of celebrated ancestors. The comparatively modern breed of Duroc-Jerseys was well represented, J. M. Stonebraker, of Panola, Illinois, the pioneer raiser of this stock, exhibiting among his herd the boar "Exchanger," now famous throughout the country. His weight is 900 pounds, notwithstanding which he is said to be light of foot.

The last two weeks of the Fair were devoted to the display of fat stock and



light draft horses. Although breeders were not debarred from the latter competition, it was specially designed for individual owners of fine horses. Standard trotters, thoroughbreds, horses and ponies in harness, with equipages, comprised the exhibition, which continued for nearly a week. Entries were made from Illinois,



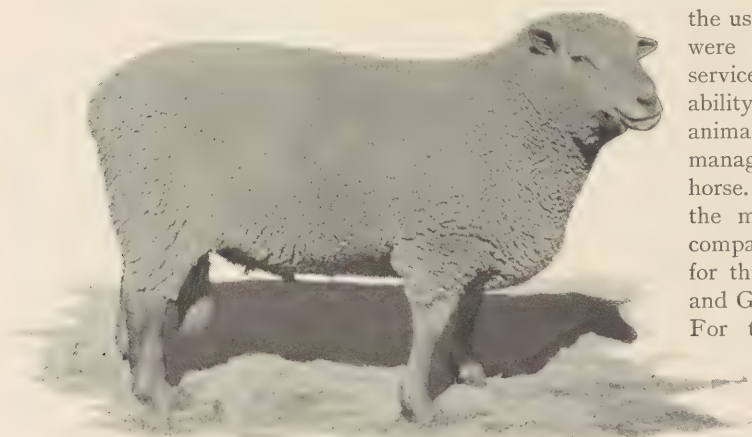
A COTSWOLD BEAUTY

working oxen, and the finest herds. In this group were also Poland China, Berkshire, Essex, Duroc-Jersey, Yorkshire, and Victoria swine, with sheep of the Lincoln, Leicester, Hampshire, Cotswold, Southdown, merino and Shropshire grades. As in the competitions for dairy and breeding purposes, held earlier in the season, the cattle were judged in the Live-stock pavilion. In this connection also may be mentioned the trained cattle, displayed in the arena by a Connecticut owner, which, under the names of Jim and Tim, Jerry and Terry, delighted thousands of spectators while the monotonous work progressed of deciding upon the premiums.

Chicago is famous for her draft horses, and her merchants, manufacturers, and express companies combined to make an exhibit of animals, harness, carriages, wagons, and trucks whose equal has not before been seen in the United States. Clydesdales, Percherons, Belgians, Normans, and other breeds were represented, the attendance indicating that cart-horse shows, so popular in England, had obtained a foothold in this country. During the forenoon of the 27th all the horses and wagons were registered at the stock pavilion, and after



OF THE CHEVIOT BREED



SPECIMEN OF SOUTHDOWN STOCK

the usual parade, returned there to be judged. Premiums were awarded on such points as the soundness and serviceableness of the animal; construction and adaptability of the vehicle and harness; general condition of animal, vehicle, and harness, as an indication of stable management; skill of the driver and tractability of the horse. Swift and company received the first premium for the most valuable six-horse team; Marshall Field and company for the best team of four horses; W. M. Hoyt for three-horse team; Swift and company for two-horse, and Gage, Downs and company for single horse equipage. For the finest wagons, the highest premiums were awarded to Swift and company and the American Express company.

"Do you know that the United States government statistics show the annual value of the

Indiana, Minnesota, Iowa, Michigan, Missouri, Kentucky, Tennessee, and Ontario, and among the breeds represented were Morgans, Arabs, American-Arabs, French, German, and English coach-horses, and trotters of the French and American classes. Medals and diplomas were given for points of excellence in animals, for equipage and appointments, and for skill in driving, and when the contest was for horses in harness, the prizes were divided as thus indicated, 50 per cent being allowed for the highest premium for the horse, and 25 per cent each for equipage and driving. Horses were driven singly, tandem, in pairs, three abreast, and four-in-hand, and yoked to broughams, phaetons, and such heavy vehicles as coaches and tally-hos. There were also special prizes, as for the most skilful lady driver and for the best appointed park tandem.

The fat-stock show comprised such breeds of cattle as short-horns, Herefords, Aberdeen-Angus, and Devons, premiums being given for the best of these breeds, for the heaviest steers, the best





A PRODUCER OF FINE MERINO WOOL

who make a specialty of fancy breeding. The display was on a much larger scale than at state and county fairs, and though containing no special novelties, was by no means devoid of interest. Here, for instance, one might compare the diminutive bantams, some of them weighing less than a pound, with the Brahmas, Shanghais and other Cochins, any one of which would outweigh a score of its tiny neighbors. White and brown Leghorns, black Minorcas, and many Spanish varieties were also on exposition, as well as Hamburgs, Dorkings, and Plymouth Rocks, the two last especially typical of England and the United States. France had also her contingents in the Houdan and Creve-cœur breeds, and Poland in her silver, golden, and white-crested specimens. Each exhibitor was restricted to four birds; but there were more than 4,000 entries in the different classes, representing a score of states, the dominion of Canada, and the republic of France. In point of numbers Plymouth Rocks led the list, followed by Brahmas, Polish of various strains, and Houdans, while of the participants Canada, New York, Ohio, Illinois, and Missouri were the most prominent.

Exhibitors both from the east and west were eager to explain their methods of hatching and raising, showing, as they asserted, the advantages of artificial incubation over the process which nature has provided. For a complete exposition of this phase of the subject the visitor was enabled to examine, in a separate building, a large array of apparatus representing manufacturers in Connecticut, Ohio, Illinois, Iowa, and other

states. Here the champions of artificial breeding claimed that the chickens hatched by machinery were not only larger and better at every stage of growth than those cared for by the mother hen, but developed into finer fowls and took the premiums at all the important fairs in the United States. At an early stage of the controversy, they said, every one admitted that the artificial method was best for the raising of market poultry; but it was asserted on the other side that the male birds must be hatched by hens. When this theory was swept away at local exhibitions by the production of prize roosters hatched by the machine process, then, as the manufacturers would have us believe, the fancy fowl breeders adopted their incubators in a body; and now, throughout the eastern states, poultry raising has become an immense industry, prosecuted almost entirely by the inanimate hatcher and breeder. One of the

poultry product of this country to be more than that of either wheat, cotton, or dairy articles?" Such was the question put by a manufacturer of chicken incubators; but as the query is in the nature of an assertion, it may serve as an explanation of the widespread interest manifested in the poultry exhibit. As the raising of fowls requires but a small capital, and the returns are quick, thousands have invested in this branch of industry, and especially many of the female sex. Thus, although poultry were not formally displayed until during the last month of the Fair, the buildings which contained them were usually filled with visitors and inquirers. While the business has assumed large proportions in some sections of the west, it was from the eastern and middle states that most of the exhibitors came, especially those



THE OXFORD BREED



DORSET HORNED SHEEP





BROWN BESSIE, A PRIZE WINNER OF THE JERSEY BREED

device by which the trays of eggs could be instantly turned without opening the machine. To prove the validity of their claims, several manufacturers had their apparatus in practical operation, the broods of chicks running around their incubators of iron and wood as lively as though they had never known any other parentage.

In the poultry division were also included carriers, pouters, tumblers, trumpeters, homers, and other varieties of pigeons, Canada being as prominent in exhibits of this class as in others. An entire barn was set apart for the purpose, and in another were housed the turkeys, ducks, geese, rabbits, ferrets, and miscellaneous pets.

In conclusion it may be said that the exhibition of live-stock in all its departments, and especially of horses and horned cattle, was the best that was ever witnessed in the United States, and probably the best in the world. Nor could it well be otherwise considering the general interest aroused by the efforts of the committee in every section of the republic, in Canada, and in the principal stock-raising countries of Europe. It was in truth an international feature of an international exposition, and though perhaps somewhat of an innovation, could not have been omitted from a display in which all branches of human enterprise were to be represented; for this, as we have seen, is an industry of vast proportions, and one to whose further development there is no apparent limit.

strongest arguments in its favor is that the vital powers of the hen, overtaxed by sitting, are reserved for laying.

The incubators here displayed were heated either by hot water or air, the electric machine being installed in its proper department and described in the chapter on Electricity. In the incubators of a Springfield, Ohio, firm the hot water circulated through a galvanized iron tank; a vulcanized rubber bar was placed in a chamber just above the eggs, and when it became expanded by heat, the flame of the lamp was cut off through the lifting of a lever upon which the bar operated. When the temperature fell so as to contract the bar, the lever was lowered and the heat again admitted. Most of the machines were supplied with ingeniously contrived thermostats, or heat regulators, an Iowa patentee furnishing a



MARY MOIDEN, A PRIZE JERSEY COW



LILLY (SIGNAL) FLAG, A PRIZE ANIMAL



"SACRED COW" FROM THE WEST INDIES



WORLD'S FAIR MISCELLANY.—As stated, the live-stock exhibition did not open until August, but the pavilion was too desirable a spot to be overlooked by those who wished to give entertainments requiring considerable space. From July 4th until the formal opening of the department the English military tournament furnished exhibitions of athletic and manly feats, comprising wonders of marksmanship



RUSSIAN HORSE AND RIDER

and horsemanship. Upon their departure for Canada, two of the members of the company, Major James Lee and Corporal J. H. Evans, of the Life-guards, were presented with a gold watch and a gold medal, the former because of his skill in tent-pegging, and the latter for bravery at the fire in the Cold Storage building, on July 10th, described in a previous chapter.

A notable occasion was the wand drill of July 26th, in which nearly 3,000 turners participated. Through some misunderstanding on the part of the management, the pavilion was still occupied by the military athletes, who at first refused to evacuate it. For a time, a riot seemed imminent; for a large crowd had collected anxious to witness the drill of the Germans. A company of Columbian guards was summoned, but the difficulty was finally adjusted, and the turners, headed by a squad of fencers, 100 strong, entered the arena. Then came a phalanx of color-bearers, and the sturdy column of the regular force, each member of which bore a burnished iron wand. The evolutions which followed constituted a wonderful exhibition of discipline, strength, and agility, the exercises of the turners as a body being supplemented by gymnastic feats, while a club from Davenport, Iowa, gave an exhibition drill in which the participants were equally divided as to sex.

The live-stock arena was the scene of several games of football, contested during the last two months of the Exposition season. Perhaps none excited more general interest than the one between a team of West Point cadets and the Chicago Athletic club, the latter winning a decisive victory. It was asserted by their opponents, probably with truth, that they would have made a much better fight had not the social dissipations in which they indulged while in Chicago unfitted them for such sport.

It may be added that the pavilion was also the scene of a contest not authorized by any one in power, and which constituted one of the few lawless acts of a serious nature perpetrated within the

limits of the Exposition grounds. Just before the close of the English tournament and the opening of the live-stock department, a British bugler and an Irish carriage washer fought a brutal prize-fight, the Englishman worsting his foe and receiving \$500 for his pains. The council of administration attempted to bring home the culpability for apparent negligence or connivance on the part of guards and police; but the result of the investigation was not made public.

In the building mentioned as containing various apparatus for the artificial raising of poultry, was a large exhibit of prepared foods for all kinds of live-stock. One kind is said both to prevent and cure chicken cholera, regulate and stimulate the laying of eggs by hen, turkey, or goose, and to be especially healthful for very young chicks. The exhibitors also manufacture a preparation for horses and cattle. One firm produced a feed made of corn from which the free starch had been extracted, stating that the animals on which it is fed become fat and sleek. Another showed a compound of seeds, roots, and herbs, to mix with the regular feed of cattle, sheep, and hogs, believing that variety of food is good for the animal as for the human race. Ground linseed cake, or linseed meal, was displayed in various forms, by several manufacturers, as a safe and nutritious pabulum for horses and cattle, especially for dairy animals. After the flaxseed is ground and subjected to a high temperature, the oil is extracted by hydraulic pressure, and the residue, or linseed cake, is ground into meal. The difference in the process of manufacturing the oil determines the comparative value of the meal as feed for live-stock, a Cleveland company, for instance, holding that by its method the cake was left with an unusually large percentage of nitrogen, a most necessary element in the food of dairy breeds. But whatever the comparative merits of the different preparations, it is interesting to learn that in the United States, and especially the west, there is an increasing demand for linseed feed. Until recent years the mills of this country turned out about one third of the world's production, nearly all of which was exported to Great Britain. Now about 400,000 tons a year are manufactured in the United States; 550,000 in England, and 200,000 on the continent of Europe.

A bull four years old and a cow of two represented the live-stock of the West Indies. They were as delicate as Jerseys, the bull being mouse-colored and the cow of a rich creamy hue; but their peculiarity was the hump between the shoulders. The specimens



RUSSIAN HORSE

were brought from Trinidad, where they are used for light-draft purposes, being fast and not ungraceful trotters. About a dozen years ago the original stock was imported from Hindostan, and has since been crossed with that of native cattle.

Illinois, Iowa, Vermont, Minnesota, and the Canadian provinces of Ontario and Quebec appropriated money for the expenses of their





DRAFT HORSE

live-stock exhibits. The awards included medals and money from the Exposition authorities and special premiums from associations. Altogether the management had guaranteed a distribution of \$150,000 among all the classes of exhibitors, including several sweepstake prizes for the best herds of cattle. Some of the states also voted large sums to be given to their successful competitors. Missouri showed special liberality in this regard, her state commission appropriating \$20,000 for the purpose. A premium of \$200 was given for each Missouri cow that captured a prize in the dairy breed contest, and half that amount for every one finally chosen by experts to be exhibited. Missouri well sustained her reputation as a leading producer not only of cattle, but of draft and trotting horses, mules, merino sheep, and Berkshire and Poland China swine. On Missouri day, August 30th, there was a special parade of the cattle contributed by that state, attended by Governor Stone and several public officials. In September, in addition to general parades of live-stock, there was a procession of nearly 800 horses, which, on passing the New York state building, was reviewed by Governor Flower, Chauncey M. Depew, and other prominent men from the empire state.

From several states were entered for competition specimens of the Morgan breed of horses, which ante-date the variety known as the standard American trotter. The exhibition of this class was the largest ever made, and to Vermont breeders its success must be largely credited. A liberal sum was appropriated for the purpose, and a commission appointed to select the choicest animals available for exposition. Although their qualities have long been recognized among experts, a determined effort is now apparent, especially in Vermont, to make them a distinctively American breed.

Among the Plymouth Rocks in the poultry show was a four-legged hen which had no competitors. Perhaps of all the breeds none were more admired than the crested chickens of the Polish variety, in one class the head-gear of pure white capping a body of jet black.

The prominence of Canada in the live-stock department was nowhere more evident than in the line of blooded horses. Quebec is especially proud of the pedigree of some of her specimens descended, as they are, from a stud sent there by the king of France, in the seventeenth century, the first of pure Norman breed to be imported into America.

In charge of the horses sent from the stables of the czar was a cavalry officer of high standing, specially appointed for the purpose.

Some of them had pedigrees running back for more than a century, and it is said that there were stallions in the stud which \$100,000 could not buy. The horses were known as Orloff trotters, Orloff half-breed saddle carriers for heavy cavalry service, Orloff-Arab, Russian-Arab, and light Russian draft.

Of the most noted breeds included in the Russian exhibit was that known as Arabian Orloff, and among the most beautiful specimens was Bekbovat, ridden by Captain Theodore Ismailoff who was in charge of the stud owned by the Grand Duke Dimitry. This famous animal was bred at the Streletsky stud of the government in southern Russia, and was one of the finest horses on exhibition. In striking contrast to the Arabian beauty was the Minnesota Clydesdale, Prince Patrick, who not only captured the sweepstake prize at the Columbian Exposition, but also took first honors at the leading fairs in Great Britain. Near the Arabian steed and the Clydesdale was placed for purposes of comparison, a typical saddle horse from Kentucky. Thus Russia, Arabia, and America met at the World's Fair.

The German government contributed 60 of the superb coach-horses for which the empire is famous. These are largely imported into France, Italy, England, and the United States, and the demand for them is steadily increasing in our own country. Of the Oldenburg breed are the massively-built animals used for heavy drafting, the Hanoverians and Holsteins being somewhat lighter in weight. The average weight of the entire consignment did not fall far short of 1,600 pounds, a noble animal of the Oldenburg type tipping the scales at 1,700. The German horses are unexcelled for breeding purposes, the laws, which are rigorously enforced, requiring that the pedigree of the studs shall be unquestioned.



AN ARABIAN ORLOFF

It was proposed by the management to hold an extensive kennel exhibit, the entries to close on the 1st of June; but, on account of disagreements among intending exhibitors, the date was postponed and the project finally abandoned.





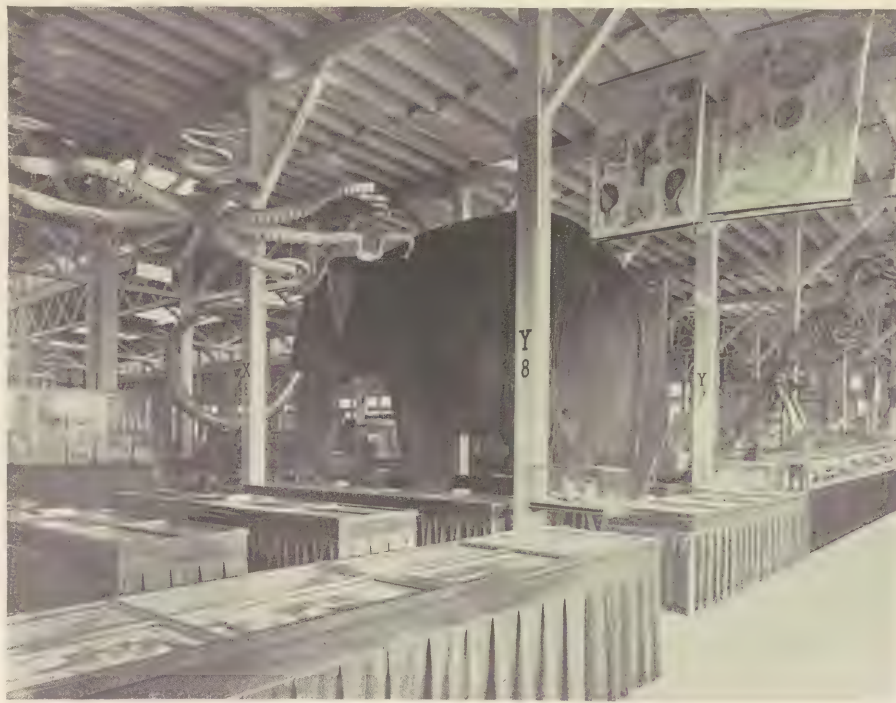
## CHAPTER THE TWENTIETH

### ANTHROPOLOGY AND ETHNOLOGY



**L**EAST pretentious among the structures of the Fair in which are housed its main exhibits is the Anthropological building, where is presented a record in miniature of man's condition, progress, and achievement from prehistoric eras to the days in which we live. In this department are several divisions and many sub-divisions, first among which are archæology and ethnology with their various branches. In the former section, beginning with the stone age, are shown portions of human skeletons and specimens of handiwork unearthed from geologic strata, from mounds and shell heaps, from caves and burial places, from the ruins of ancient cities and pueblos, and in a word from every portion of the New World where its ancient races have left their impress. From the valleys of the Ohio and Mississippi, and elsewhere to the borders of either ocean, from Mexico and Central and South America have been unearthed, after the lapse of unnumbered aions, their buried implements of stone, iron, or copper, their household utensils and ornaments, and whatever else may serve to throw light on the palæolithic and other prehistoric periods. Some of the exhibits are arranged in geographical groupings, as the models of cliff dwellings from Colorado, New Mexico, and Arizona, and of the sculptured ruins of Copan.

For those who incline to this field of investigation, a section is devoted to physical anthropology. Here, in the skulls, charts, diagrams, and models gathered from many nations, may be compared the past and present types of the human race. There are the skulls of the ancient Greek, Italian,



MAMMOTHS OF THE DEPARTMENT



German, and Helvetian; there are the skulls of savages and apes; there are casts of faces typical of tribes and nationalities; there are diagrams showing the comparative stature and anatomical measurement of men and women in various countries, with photographs, statues, and other appliances for a thorough study of this important branch of science. Elsewhere by similar agencies are illustrated the functions and activities of the brain and the organs of sense, whether in normal or in unhealthy condition. In the case of children there are also apparatus for an experimental study of mental phenomena, the subjects being chosen from those who would submit themselves to certain tests while visiting this department of the Fair.

A special and most interesting section has for its subjects primitive religions, folk-lore, and games, the last being grouped together so as to form a comparative study. But it is on the exhibits relating to the

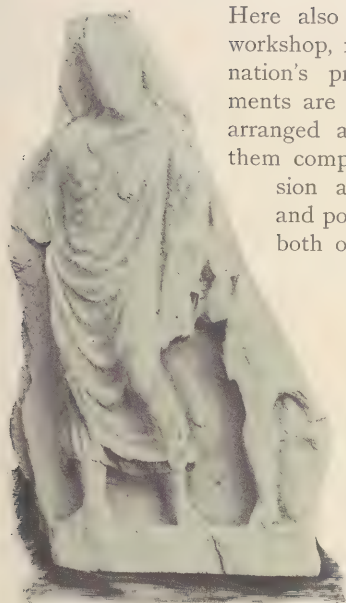


INTERIOR VIEW OF THE ANTHROPOLOGICAL BUILDING

condition and progress of man that the interest mainly centres, and especially on such as pertain to modern man; for from the relics of the buried past, whose history at best is largely diluted with speculation, we turn with a sense of relief to more practical evidences of his achievements as contained in written or printed page. Thus it has been the prime object of the ethnological display to afford an opportunity for the study of national types, not only from a scientific point of view, but as far as possible through living specimens. To this end a strong background has been obtained by placing before the spectator the representatives of races existing on this continent in the days of the Columbian era. Then are illustrated special epochs and events, with portraits and busts of those of whose lives and achievements our history largely consists, but without allusion to the annals of the civil war, a theme entirely out of place in an exposition devoted to the arts of peace.

But the exhibits of this department, and especially its historical exhibits, are not restricted to the Anthropological building. In the convent of La Rabida is a collection relating especially to the Columbian epoch, under the special charge of William E. Curtis, of the Latin-American bureau. In the Government edifice is a large gallery of paintings, photographs, and other illustrations pertaining to the Latin-American republics. In a model Indian school are the representatives of many native tribes, gathered almost from the shores of the Arctic ocean to the gulf of Mexico. Here is the civilized Indian at his task of making blankets, baskets, pottery, or at the more welcome task of eating and drinking, or playing with his children and his dogs.





A GRECIAN FRAGMENT

Here also are specimens from farm and workshop, representing the industries of the nation's protégés, while in other departments are tribal exhibits, each one carefully arranged and credited, and not a few of them competing for awards. To this division also belong the state collections and portions of the Midway plaisance, in both of which are ethnological features.

Additional attractions in this department are exhibits in natural history and taxidermy from several of the states, from the Canadian province of Ontario, and from Brazil, including valuable collections from Ward's Natural Science establishment at Rochester and from the Agassiz association at St Louis. These are not restricted to the hall of Anthropology, the Kansas state building, for instance, containing the best

specimens of taxidermy displayed in the Exposition and one of the best in the world.

The general plan, however, is to illustrate in a series of object lessons the development of various phases and adjuncts of civilization, as architecture, household conveniences, appliances and methods for the saving of life and labor, for the discipline and reform of criminals, for the cure of the sick, and the relief of those who are in need. Sanitation and hygiene, charities and corrections, properly belonging to the department of Liberal Arts, find expression in the Anthropological building. In apparatus, models, plans, photographs, and literature are shown the progress and condition of sanitary science as applied to dwellings, workshops, stores, and public buildings. Here are displayed the best systems of heating, ventilation, and drainage; the precautions used to prevent and check infectious diseases, and to minimize the danger to health incidental to certain trades. Another branch is athletic training in various forms, and still another is the adulteration of food, with the proper means for its detection.

In connection with charities, asylums and homes for all classes of the unfortunate or infirm are compared in their several sections.

Over the main northern entrance of the Anthropological building, in the southeastern extremity of the grounds, is the inscription, "Man and His Works," thus briefly and aptly explaining the purposes of the display. A floor space of more

than 100,000 square feet is mainly occupied by the archaeological and ethnological exhibits of foreign countries and of state boards and individuals, together with the collections gathered from various parts of North and South America by a corps of



CORNER OF MEXICAN SECTION



ESKIMO VILLAGE



ANTIQUÉ FROM CENTRAL AMERICA





AN ARRAY OF BUILDINGS WEST OF THE WOODED





ARCHÆOLOGY AND ETHNOLOGY

the most famous of Grecian sculptures and statuary, exhumed from the mausoleums and ruins of Mycenæ and Delos, of Bœotia, Attica, and Thessaly. Among them are statues of Diana, Apollo, and Victory, with allegorical groups representing various subjects. Of special interest are the replicas of two statuettes of Minerva, executed by Phidias in ivory and gold, with figures of Mercury, one of which is a cast of what is said to be the only authenticated work from the hand of Praxiteles. Here also are represented colossal statues or fragments of Arcadian origin, once forming a portion of a group in the temple of Proserpine. Among sculptures of the fifth and fourth centuries of the pre-Christian era are



ANCIENT PERUVIAN BURIAL GROUND



ESKIMO VILLAGE

assistants under the direction of F. W. Putnam, as chief of this department. In the northern portion some 30,000 square feet are set apart for the bureaus of hygiene and sanitation, of charities and correction.

Passing through the northern portal, the visitor observes a few small collections illustrating certain points in the antiquities and ancient arts of Assyria, Egypt, and Rome; then proceeding down the main aisle, he finds at its central point the government exhibits of Greece, supplemented by contributions from the Chicago museum of art. These are for the most part reproductions of

bas-reliefs from the acropolis and figures from Arcadian and Olympian temples; but most ancient of all, and perhaps the oldest specimen extant, is a relief from the Lion gate at Mycenæ. Belonging to later periods are the colossal statues of Justice and Neptune, from originals discovered in the island of Melos. Finally there are busts of the emperor Hadrian and his favorite, Antinous, with figures or heads of Hermes and Pan, of Minerva and Medusa, of Athenian youths and dancing women.

Beyond the Grecian section are other collections relating to European archæology, including those from the government museum at Vienna. A Moravian contributor shows the skull and bones of a monster bear, a cave-



dweller of prehistoric times. In this vicinity is also a valuable display of Egyptian antiquities from Albany, with one from the imperial museum of Japan containing relics of the earlier ages of its island empire.

Mexico occupies a large area adjacent to that of Japan, reproducing not only her ancient ruins but the historic structures described by Spanish chroniclers as existing at the time of the conquest. From the Federal district comes a model of ancient Mexico, with specimens of Aztec furniture, and from various states, from the scientific institute at Toluca, from the Mexican Central railway, and many private exhibitors are other contributions which fill this large and well arranged section. Models of rural homes familiar to travellers in that country are side by side with musical instruments, household utensils, pipes, cloaks made of bark, and other apparel worn by native Indians. Aztec lances, battle axes, shields, and war drums are massed in one corner, and not far away is a group of stone heads and idols, with ancient coins, copies of antique manuscripts, water color paintings of antiquities, human skulls and jaw bones, casts of inscriptions on stone, and models,



MISCELLANEOUS SPECIMENS OF SAVAGERY

photographs, albums, and books illustrating past and present types of Mexico's native races. The Mexican Central sends an interesting collection of coins, pieces of obsidian, and plaster casts of Aztec calendars, and elsewhere are charts showing the ancient system of recording time, with painted shields of Aztec warriors and a copy of Mexico's earliest map.

On the opposite side of the main aisle Ohio, Indiana, Missouri, Wisconsin, Colorado, and the Canadian province of Ontario, most of the former through their historical societies, and the latter as a government display, have large collections of pottery, implements, and weapons pertaining to prehistoric tribes. These are supplemented by private contributions, forming together a most interesting study in archæology. Colorado, for instance, thus describes in part the history of her ancient cliff dwellers, and so with Arizona, New Mexico, and Utah. There are pottery and stone implements from the great shell heaps of Florida and Maine, while Michigan, Illinois, and Missouri contribute from their valleys and ancient village sites utensils not only of stone but of copper. Other relics are from the mounds of Tennessee, Kentucky, and Arkansas, from Connecticut, and especially from the valley of the Delaware, whence the collection was made by an agent of the Anthropological department. Several experts were also despatched to the valleys of the two Miamis, the Muskingum, Scioto, and other tributaries of the Ohio, around which cluster so many of the mysterious mounds supposed to



be remnants of fortresses and burial grounds, among which are records of animal symbols, or totems, adopted by family or tribe. The famous Serpent mound, over 1,200 feet in length, is here in miniature relief, displaying what archæologists believe to be an egg symbolic of the creation of the world. Reconstructed on a small scale are also the Turner and Hopewell groups of mounds, the latter, more than a score in number, built on a terrace, with another elevated surface bordering the creek near by, and a third not far away, where careful

exploration disclosed many pieces of copper, fashioned into various geometric figures, into ornaments, and forms of bird, fish, and beast. Implements of copper, mysterious crosses of the same metal, shells, bears' claws, sharks' teeth, mica, carved bone ornaments, spear and arrow heads, and thousands of flint chippings are some of the articles taken from the Hopewell farm and exhibited in this department. Among the illustrations of prehistoric life drawn from the soil of Ohio may also be mentioned the survey maps of Fort Ancient and those of the Marietta earthworks and other well known localities.

After Ohio, the state of Wisconsin, through its historical society, presents the most interesting study for those who would further investigate the much disputed question of the mound builders. Here the mounds are chiefly located in the valleys of the Fox, the Wisconsin, and other prominent waterways, clustering most thickly around the larger cities of the present day. In other sections are numerous heaps of

earth such as have already been described; but while these forms are also very numerous in Wisconsin, the so-called effigy mounds, in which is depicted the human figure, are believed to be peculiar to that state. Therefore it is that the tablets in this collection, showing the model and outlines of a group of effigy mounds, are considered of special value by the department.

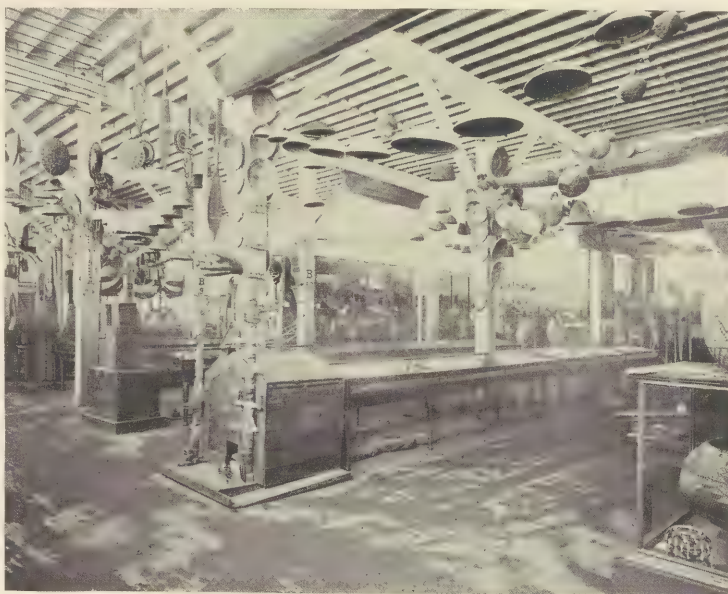
From the neighboring state of Minnesota has been forwarded by a private contributor a section of her pipestone quarries, long considered the only source of supply for the making of the calumet, or pipe of peace, with which is connected much of the semi-religious aspect in the Indian mythology of the west. Among private

exhibits relating to archæology mention should also be made of a collection from Frank G. Logan, of Chicago, purchased from H. N. Rust, of Pasadena, whose days have been passed in archæological researches extending from New Hampshire to California. There are in all some 3,000 specimens, among them the flat stones worn by prehistoric man into cup-like grooves, while crushing bones or grain, with stone hammers, axes, and rude implements for tilling the soil. From California the relics include a portable mortar, the upper part of which is of wicker work and the bottom, a stone; cooking vessels of stone and clay; stone lamps, with pieces of bark for wicks; stone rings utilized as sinkers for fish nets, as mallet heads, or as weapons; stone tubes employed by medicine men for cupping processes, and pieces of obsidian from the Klamath Indians and the ancient Aztecs, by the former used as ornaments and indications of rank, and by the priests of the latter for killing their sacrificial victims. In the Aztec groups are also polished stone work and neatly fashioned urns in which were placed the ashes of the dead.

In other sections, separated by the width of the hall, are interesting and valuable collections gathered by the agents of the department from Honduras and Yucatan, from Colombia, Bolivia, Peru, and other points



A NATIVE HUT OF BRITISH GUIANA



A PRIVATE ETHNOLOGICAL EXHIBIT

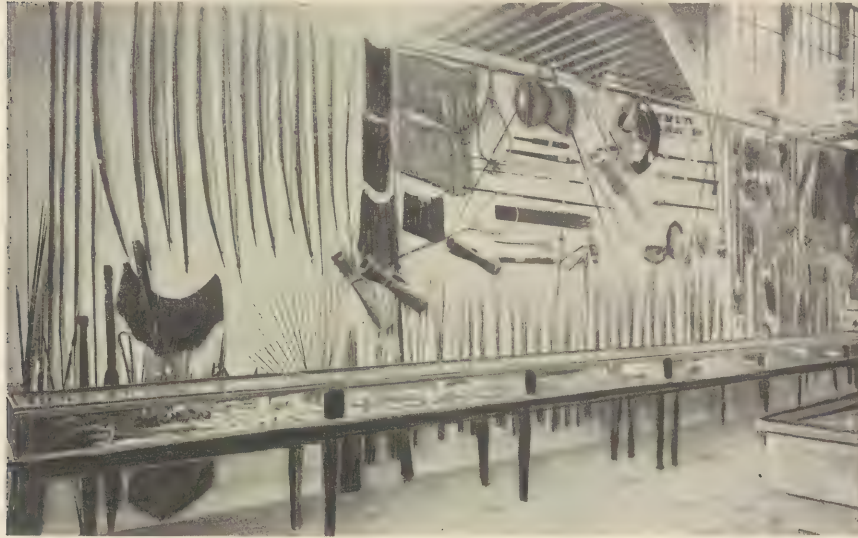


in South America and the West Indies. As reproductions of the famous sculptures of Central America, the French minister of public instruction has furnished imposing casts, covered with strange figures and hieroglyphics, from moulds taken by Désire Charnay. Other contributions are from the Berlin museum, the government of Honduras, and the Peabody museum of American archæology. For those who care not for these strange weird forms and faces, there is a gallery of forty large photographs, representing the exhibits of Great Britain and the achievements of one of her explorers, whose views were taken from the ancient structures of Guatemala, Honduras, Chiapas, and Yucatan.

More imposing and complete than anything within the building, however, are the reproductions of the Yucatan ruins displayed, as I have said, outside its walls. The explorations were made by E. H. Thompson,

the United States consul and agent of the Exposition, his moulds consisting of the portal from the central structure of the group of ruins at Labna, the façade of the Serpent house, and three sections of the house of Nuns, the last from the ruins of Uxmal.

Returning to the Anthropological building its most uncanny collection is from the ancient land of Peru, whence is a substantial reproduction of a burying ground at Ancon. There are ridges of gravel and sandy soil, with mummies in all positions, and skulls, bones, and cloth interspersed. The preservation of the bodies is largely due to the almost total absence of rain in the locality



BOWS, ARROWS, AND OTHER REPRESENTATIVE ARTICLES

whence they were taken, and to the saltpetre and other preservative elements contained in the soil. There are more than 100 bodies of the Incas and other personages of note, one with colored standards and war club beside him, others swathed in richly colored blankets or cotton cloth, and all with jars of provisions beside them; so that they hunger not on their way to the hereafter. Many of the bodies are tattooed, and adorned with beads and copper ear rings, while on tablets fashioned of cloth, stretched upon frames of wood and painted with figures and characters, are described the virtues of the deceased. The latter, together with the clothing and other articles taken from the graves, are wonderfully preserved, even to parrots' feathers found on the heads of warriors. As Ancon was a fishing town, many nets were unearthed from its sepulchres, and these are almost intact, as are the baskets of woven fibre representing the industries of women.

The agent who explored this famous necropolis of Peru, also visited



REPRODUCTION OF YUCATAN RUINS, OUTSIDE ANTHROPOLOGICAL BUILDING



portions of Chili, Bolivia, and Ecuador, in the interests of American archæology. It was from the island of La Plata, off the coast of Ecuador, that he collected the rarest of the relics aside from those gathered from the burial ground of Ancon. The former was virgin soil for the archæologist, and with the coöperation of the government, he was enabled to exhume not only the bodies of the dead, but finely wrought pottery and beautifully finished cups, jewelry, and idols of gold. Slabs of the precious metal were also discovered, from which these works of art were fashioned. A large area was covered with a stratum of ashes several feet in thickness, which appeared to separate other relics from those of finer workmanship. The investigators concluded that they had found a large cemetery where the dead were burned, and that the stratum was the dividing line either between two peoples or two grades of civilization, the utensils and ornaments plainly indicating different degrees of skill and culture. In this connection may also be mentioned the large collection of pottery, wooden vessels, ornaments, implements, and various articles of gold, silver, copper, and stone, gathered in the Cuzco valley of Peru and relating to periods when this locality was the centre of governmental and priestly power. Here was the great Peruvian temple of the Sun, whose ruins are still imposing.

In another portion of the hall, near the casts of Central American sculpture, is a group of picturesque exhibits from Brazil, British Guiana, Costa Rica, and Paraguay. In character they partake both of the archæological and ethnological. For example, in the Brazilian section the national museum and the museum of Para contribute ancient pottery; urns containing the ashes of the dead; carved images of hideous aspect representing the heathen gods before the advent of Christianity; huge clubs, bows and arrows, blow guns, and other weapons; painted images of religious import, and household utensils made by Indian tribes of the present day.

Here also is a number of pictures, a large oil portrait representing a South American native, his black body gleaming like ebony, his black hair adorned with bright-colored feathers, and his neck encircled with a necklace of teeth taken from the jaws of wild animals, while from his feathered breech-cloth hangs a quiver of arrows, the long bow which he seems able to wield to good effect lying by his side. From Costa Rica come pottery, implements, ornaments, utensils, and weapons gathered from ancient graves, large maps hung upon the walls of her section indicating the most important districts from an archæological point of view, and large paintings illustrating the appearance and customs of the natives.

But one of the most complete collections of curios relating to the South American Indian of to-day is

that which resulted from the expedition of Lieutenant Roger Welles to the upper waters of the Orinoco river. The lieutenant acted as an agent of the department, and his display consists of reed blow-guns, some of them ten feet in length; spears, large bows, and poisoned arrows with fish-bone tips; reeds bound together to form a single instrument; glazed pottery simply but tastefully ornamented; tinder boxes made of bamboo or bone; baskets, combs, boards into which flints are set for grating cassava roots, and hammocks made of the fibre of a native palm; implements used in extracting india rubber, feather head-dresses and costumes, strings of monkeys' teeth, and other articles illustrating the domestic, industrial, and warlike phases of aboriginal life. Finally there is a number of articles from the Caribs of the West Indies, the fiercest of the tribes with which Columbus had to deal.



MODEL HOUSE FOR NEW YORK WORKINGMAN

Among the ancient enemies of the Caribs, it is said that the Arawaks were the most powerful, often repelling the incursions of the former upon the mainland. One of the most notable of the ethnological specimens



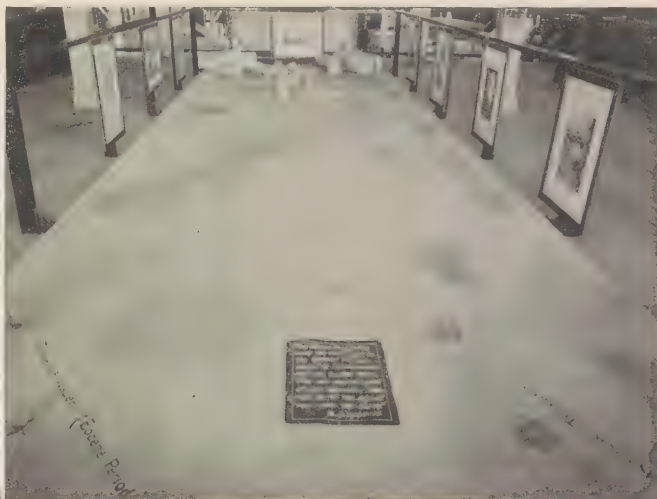
HYGIENIC APPARATUS



is a full-blooded native of the latter tribe, brought from his forest home to assist the British commissioner in his arrangement of the Guiana section. The exhibit, one of the most picturesque in the department, is grouped in and around two huts, one such as serves for habitation the Indians of the forest, and the other those of the coast. There are hammocks of various kinds, plain and ornamented; benches of wood and tortoise-shell; tinder boxes, and the more primitive fire sticks. Elsewhere are tobacco leaves; cigarette paper made of vegetable fibre, and miscellaneous leaves and fibres, used for thatching, for twine and ropes. There are also fibres and ropes for making hammocks, and spindles and frames employed in their manufacture. In the



MASTODON RELICS



FOOT PRINTS IN GEOLOGICAL STRATUM NEVADA

line of dress and ornaments are various styles of aprons worn by the women, fashioned of bark, cotton, and beads, with cotton anklets and waist belts, plain and adorned with fringes or pendants. Teeth of jaguar and peccary are made into necklaces, and there is nose jewelry of silver and tin. Feathers of brilliant hue are used for head-dresses or girdles for the arms and shoulders; a fish spine serves as a tattooing implement, and there are dyes of red, yellow, and white for staining the face and body.

Native warrior and sportsman are represented by war-clubs, bows and arrows, blow-pipes, fish-traps and nets, and hunting bags of skin and wicker work. The arrows are of many kinds; those for killing birds, with bamboo points; for stunning them with blunt heads; for shooting fish, metal heads; for large game, metal spear heads; for turtles, separable metal heads; and poisoned arrows for game, with bamboo point and cap. Domestic life is represented in a collection of jars, jugs, gourds, and baskets; corn mortars and pestles and sugar cane crushers; graters, pressers, and baskets for the preparation of cassava; hollowed trunks for festive drinks with paddles for stirring them, and mats for protection against stinging ants and the coercion of unruly children.



PENNSYLVANIA STATE COLLECTION

Wrestling shields, dancing sticks, rattles, trumpets, flutes, an Æolian harp made from the stalk of a palm, and a head-dress of leaves point to sport, music, and the dance. The environment of the native Arawak is further illustrated by cabinets of birds, fishes, and animals used for food, and a collection of photographs showing the country which he inhabits.

Thus it will be seen that the native races, both past and present, of what is known as Latin-America are fully represented in the Anthropological department. A collection yet to be mentioned is that of Emil Hassler, the Paraguayan commissioner, one pertaining

to the customs not only of the native tribes of his own country, but of more than forty others, scattered over the central portions of South America. This collection, the result of many years of labor, was the only



exhibit from South American countries for which a gold medal was awarded at the Paris exposition of 1889. The tribes from which it was gathered were sparsely scattered over the territory occupied by the Tupi-Guaranis family during the Jesuit occupation, and here is nothing in the way of idols, all traces of idol worship being destroyed during the seventeenth century. The collection consists for the most part of weapons, utensils, and articles of rude manufacture. Among the first are spears whose points are made of wood, stone, bone, and iron; stone axes, and bows from which stones instead of arrows are shot. There are also primitive machines for spinning cotton threads, and a shawl of cotton, made entirely by hand; shells, teeth, hammocks, straw hats, pottery, boat and oars, fishing implements, bone



ANIMALS AND BIRDS OF BRAZIL

knives, lip perforators, wooden ear plugs and ornaments for the head which were composed mainly of feathers.

In the western quarter of the Anthropological building a considerable space is devoted to the large and interesting government exhibit from New South Wales, and to the collections from New Zealand, New Caledonia, and other islands of the South Pacific. They are mainly composed of weapons, implements, ornaments, and costumes, arranged in striking designs upon the walls of the various sections, supplemented by hideous idols

from the New Hebrides and Solomon groups, and by paintings of typical natives, some of them hardly less repulsive. There is, however, a reverse side of aboriginal life, furnished chiefly by the board for the protection of the aborigines of New South Wales, whose headquarters are at Sydney. From the children of the school established by this board are specimens of handwriting and needle-work, with drawings executed by a famous chief of the Ulladulla tribe, dealing principally with hunting and fishing scenes. The assortment of Polynesian curios is further enriched by contributions from the royal museum of Vienna, and by those of private individuals, among which is one from New Caledonia, while from New Zealand are implements, ornaments, and cloth of Maori manufacture.



MAMMALS OF THE PINE TREE STATE

In this vicinity also are the fetiches of central and western Africa, with the musical instruments, household utensils, ornaments, and weapons peculiar to the dark continent. On one of the walls is a group of weapons from the basin of the Congo, and the warlike Zulus furnish an interesting collection of arms, sceptres, and royal insignia, with ornaments of silver, ivory, and horn. Not far away is a group of Chinese idols and other objects referring to oriental religions, with a special display illustrative of the life and customs of the Chinese in the United States. Then come private

exhibits, including baskets, bead-work, ornaments, and costumes of North American Indians. For those who wish further to investigate this subject there is a gallery of pictures, mainly by George Catlin, relating to aboriginal life in America, and showing not only types of leading tribes but chiefs prominent in the history of





SECTION OF THE ETHNOLOGICAL DEPARTMENT

Indian warfare. The Wisconsin Historical society sends an interesting exhibit of garments, utensils, and other articles bearing upon the customs of such noted tribes as the Chippewas and Winnebagoes, while a Washington contributor, who for a decade has been investigating the subject of Indian music among the tribes of the west, displays the results of her work, especially among the Nez Percés, Omahas, and Winnebagoes.

In this exposition of the life of North American Indians, however, the tribes of the far northwest furnish most of the ethnological material. Alaska and British Columbia are especially rich in this respect, and to these regions the department sent many agents, as well as to Labrador, Greenland, and other habitats of the Eskimos. Thus may be gleaned something of the peculiarities of a race which seems to be a connecting link

between the old world and the new. From Alaska are pipes and other articles carved in wood and ivory, with masks and head-gear such as are used by the priests, or shamans of Siberia. There are also carved bowls; wooden chests and boxes inlaid with ivory, bone, and shell; horn ladles, dishes, and spoons; fish-knives and curious hooks; fire sticks and tinder boxes, surgical knives and a multitude of other articles among which are pictures of considerable merit. But perhaps the most interesting of all is the model of the Indian village of Skidegate, on one of the Queen Charlotte islands off the coast of British Columbia. Worthy of special note



ALONG THE BEACH FROM POINT ABOVE FRENCH GOVERNMENT BUILDING



are the carved posts, fashioned by the Haidas into shapes of beast, bird, and man, representing either some symbol which has been adopted or some myth handed down through the ages. Within the building both totem poles and structures are much reduced in size; but on the shores of the pond near by are reproductions of the originals.

Extending across the southern portion of the building is a double row of cases which mark the dividing line between the departments already described and those that relate to sanitary and reformatory measures. Grouped among the latter is material illustrative of the folk-lore, traditions, and customs of many races; but here the field is so vast that the collection has been practically restricted to the subject of games, and even in this regard it is remarkable how much mankind has in common. The basis of the collection was formed in the museum of archæology in the university of Pennsylvania, and this has been supplemented by exhibits from individuals and the leading manufacturers of appliances for games in the United States.

As the games are classified and arranged for comparative study, the puzzles and simple apparatus for children commence the series. Ancient puzzles from East India and China are seen in many familiar forms, those from the latter usually made of wood, bone, or ivory. Simpler still are the counting-out rhymes of children, contained in book form and common to many countries. Here the boy with his first top, which represents to him a new form of plaything, finds in one of these cases a wooden object not unlike his own treasure, discovered in Egypt and dating about 2,800 B.C. From the burial grounds of Ancon, Peru, similar objects were unearthed. The Sioux of North America made for their children, in primitive times, balls of stone and baked clay, which were spun on the ice like whip tops. Later, they fashioned them of wood, adding pegs of brass. Pop-guns and squirt-guns, it is found, have amused the children of the native tribes of East India and the aborigines of North and South America, while jackstraws, under different names, have been used in China, England, and France since time immemorial.

Games of ball were common in Egypt long before the reign of the Pharaohs, the most ancient specimens of implements being a stick and small block of wood which served for this purpose more than 4,600

years ago. They were also a favorite pastime in Turkey, in Asia, Persia, India, China, and Japan, spreading thence to Europe and the western hemisphere. All the appliances are here displayed, together with the wicker baskets and flat bat used in Spanish ball games, while a Chicago house has an exhibit of the articles employed in games of cricket, base-ball, foot-ball, golf, polo, la crosse, lawn-tennis, racket, and shuttlecock, with Japanese and Chinese forms of the last-named. Ring games of various kinds are illustrated, and a collection of large Burmese seeds and the knuckle bones of Turkish sheep, weighted with lead, are among primitive



PENNSYLVANIA EXHIBIT



MODEL OF OHIO SERPENT MOUND

forms of marble playing, other implements being shown as in use to-day. To illustrate the comparatively modern games of bowls, billiards, and croquet, a Chicago company shows apparatus and miniature models of





VIEW FROM TRANSPORTATION BUILDING, LOOKING NORTH



remarkable beauty and finish, while another interesting collection is from the Chicago curling club. Adjoining is a case in which are gathered from China, Korea, Japan, Siam, Egypt, Morocco, Peru, and New Mexico, the boards and pieces for games resembling chess and draughts. The boards used in the Japanese and Peruvian games of fox and geese are almost identical, and as these were unknown in either country until the sixteenth



HAUNTS OF THE CLIFF DWELLERS AS SEEN AT THE FAIR

century, it is inferred that they were of Spanish origin. Perhaps the most interesting form among this class of games is furnished by the Zuñi Indians of New Mexico, the board upon which it is played being divided into 144 squares, each of which is crossed by two intersecting diagonal lines. Says Stewart Culin, in charge of the folk-lore department: "The moves are made one square at a time along these diagonal lines, the pieces

being placed at the angles of the squares. Two or four persons play. They each start with six men, and their object is to get their men across to the other side and occupy their opponent's places, capturing as many of his pieces as possible by the way. A piece is taken by getting it between two others, as in the modern Egyptian game of seega, and the first piece thus taken may be replaced by an extra one belonging to the player who makes the capture, which may move on the straight as well as the diagonal lines and is called



FRAGMENT SHOWING THE FEAST OF BUDDHA



BUDDHA'S WEBBED HAND

the priest of the bow. This game, which is arranged and is exhibited by Frank Hamilton Cushing, is called *A-roi-thlak-na-kwe*, which he translates as 'stone warriors.' Edward Falkener in his work entitled, *Games Ancient and Oriental*, which he lent for exhibition here, has published a restoration of the ancient Egyptian game of



senat from fragments of Egyptian boards which have come down from 1600 B.C. The game as thus restored is in some respects similar to the Zuñi game, the men being taken as in seega by getting them between two others. The Zuñi game, however, may be regarded as in advance of any other board game even of our own civilization, until we come to the true game of chess.



INDIANS OF BRITISH COLUMBIA

simplified form of chess, now follow, and here are shown two sets of interesting German draughts-men of the eighteenth century."

Games of chance, in which dice, dominoes, and cards, or their equivalents, are variously employed, are included in a division which is profusely illustrated. The American Indians almost throughout the entire continent played a game with marked plum-stones, bones, or wooden pieces, a small basket taking the place of the dice-box. In the East Indies cowries are used; in Peru, knuckle bones, and in China the roots of the bamboo. Specimens of these and other primitive implements are displayed, among them the bones in their natural state from the legs of the sheep, used by the Syrians in their games of chance. The oldest die in the collection is made of pottery and bears date 600 B.C. It was discovered among the effects of the Greek colony of Naucratis in Egypt.

The game of dice, it is said, was carried from India into China, where the twenty-one possible throws with two pieces each received a name. To this day it still remains the principal game of its class in the flowery kingdom, where in the twelfth century dominoes were invented and cards evolved from dominoes and chess. All this is clearly illustrated, as also is the origin of backgammon from the game of "Twelve Lines" played in the time of the Roman empire and during the middle ages. From Damascus is a pearl-inlaid backgammon board, and a similar article is displayed by the Siamese commission. In China and Japan, however,



LONG CABIN OF THE SIX NATIONS



backgammon is not usually played as in Europe and America. In one of the Chinese games here exhibited is a large paper chart upon which are printed the titles of various officials, and the players are advanced or degraded in rank according to the throws of their four cubical dice.

Besides the Chinese, there are several packs of East Indian cards, circular in form, with flower and proverb cards from Japan, and some of the earliest specimens known to Europe, including those which first



QUARTERS OF THE NAVAJOS

appeared in Venice. It is generally conceded that playing cards were invented in China during the twelfth century; and among the most interesting of the collections is the one exhibited by W. H. Wilkinson, consul at Swatow, consisting of a series of dice, dominoes, and cards gathered from the principal cities of the empire. From this it may be seen how very similar are the games of cards as played in China and Europe. The suit marks in the Italian cards consist of money, cups, swords, and clubs, and during the early period of their manufacture the printing was performed with stencils. Side by side are the cards that were used in Florence,



BIRCH BARK HUTS OF PENOBSCOT INDIANS

Milan, and Naples, with the stencils, brush, and unfinished card sheets from a Florentine maker who still adopts this ancient mode of manufacture. In the old German packs the suits are hearts, bells, leaves, and acorns, and in the court cards the queen is omitted. Beautiful specimens of modern make are also exhibited,



which show the French suit marks of hearts, diamonds, spades, and clubs, now generally adopted. Other European varieties are here, as well as various Spanish and Mexican packs, some of the latter resembling those of Italian make.



CLASS OF INDIANS IN FRONT OF SCHOOL

through no fault of the department. In the section containing gymnastic and hygienic supplies a Providence company has in its spacious pavilion every form of appliance; a St Louis house exhibits apparatus for home training, and a Michigan sanitarium displays models of its buildings and the articles therein contained, especially as to the styles of dress considered most healthful for women and best adapted to their physical development.

In the section devoted to physical development, training, and condition are numerous appliances, for the most part of modern fashion. Beginning with the nursery and its accessories, they include such as pertain to gymnasia, to wrestling, rowing, hunting, skating, climbing, and acrobatic and other exercises, with special apparatus for the drill and training of pupils in public schools and higher institutions of learning.

In the hygienic and in other departments there are various appliances for analyzing food and water and for sterilizing meat extracts and infant foods, thus removing all disease germs. Many of these are from German inventors and sanitarians, while state boards of health show their interest in this line of investigation by contributions of hygienic literature, with maps and diagrams, and of appliances used in the detection of impurities and adulterations. For example, Pennsylvania displays a bacteriological outfit, including apparatus for collecting specimens of drinking water from hydrants. From New Jersey are specimens of adulterated foods and drugs, while Massachusetts illustrates modern methods of analyzing them. Women have also many practical suggestions to offer in this connection,

As already stated, the bureaus of charities and corrections and of hygiene and sanitation, included in the department of Liberal Arts, were installed in the Anthropological building, this being due to the urgent demand for space by the educational institutions of the United States and foreign countries. The aim of the latter bureau was to demonstrate, as far as possible, the condition of sanitary science at the present day, and especially to show that it has not received the attention and support which its importance demands. Notices were sent to universities and colleges, boards of health, sanitary and hygienic societies, physicians, manufacturers of gymnastic and hygienic supplies, and the public generally, soliciting contributions to the several groups into which the exhibits were to be divided. The result was a most creditable display, not least among the purposes of which was to call the attention of municipal authorities to the lax sanitary systems prevailing in their midst. If in this it did not altogether succeed, that was



WILLIAM E. CURTIS



THE ORIGINAL LA RABIDA IN SPAIN



the Ladies' Health Protective association of New York, for instance, furnishing models and photographs of abattoirs and dust carts. The empire state is further represented outside the building in a frame structure and tent, the former containing the exhibits of cooking schools, with a model kitchen and a lecture room where also are held discussions and practical demonstrations having a special bearing on the preparation of foods for invalids and children. Within the tent is a complete outfit of camp utensils, with health appliances for out-

door life. The exhibit of the cooking schools is under the management of Mrs. J. S. T. Stranahan, Juliet Corson, the founder of the first institutions of this character in the United States, acting as the leader of the classes.

Before taking leave of this subject, it may also be stated that in the Anthropological building is a large collection of apparatus for cleansing water—not only so-called germ-proof filters, but appliances for purifying both water and meat by electricity. For those who desire still further to pursue their investigations, there is an abundance of literature devoted to the subject, with dietaries especially designed for the army, the navy, and the prison, while in models, charts, and transparencies are shown



INTERIOR VIEW OF LA RABIDA

the effects of disease caused by impure food and water, with the appearance of the special germs which the vitiated blood is unable to absorb or reject.

A division of the hygienic department in which many are interested is that which illustrates improper modes of building, draining, ventilating and warming, the defects being shown in tenement houses, flats, city and country residences, as well as in public structures. New York and Pennsylvania are especially prominent in showing the latest improvements in the construction of tenement houses and residences for working-men. At the north end of Midway plaisance the women of Philadelphia have reproduced one of the 170,000 cottages owned by the working-men of that city, and here is in truth a model as to sanitary requirements. In the southern portion of the grounds New York is represented by a plain frame structure of two stories, surrounded by a small grass plat and flower garden, such as can be built for the sum of \$900, and large enough for a married couple and a family of several children.

As to questions relating to public health there is also a large amount of material from many states, including, diagrams, maps, and publications explaining their sanitary condition, with the means adopted to prevent disease. Water-works and sewerage systems, public baths and lavatories and the various methods for disposing of sewage and garbage are illustrated in this division. Several manufactories also exhibit special appliances, a Des Moines company showing a fire closet made of iron stone, intended for burning the refuse from private or public buildings. In the extreme southeastern corner of the grounds the same company has a furnace constructed for city use in which is



ONE OF THE ENTRANCES





THE CHAPEL OF THE CONVENT

ship's bedding and furnishings, and the wearing apparel of the passengers. The apparatus consists of a series of connected steel cylinders, extending along the wharf, their open ends facing the vessel, and each cylinder fitted with coils of steam pipe. In rear is a large boiler which supplies the steam required to destroy the germs of disease, thermometers placed at convenient points showing when the proper degree of temperature has been reached.

In less attractive fashion is exhibited the quarantine system of New York and the city water supply from the Croton aqueducts, while Buffalo sends photographs of its public crematory, and the Massachusetts board of health an exhibit which is worthy of special mention. In the principal court of the pavilion occupied by this board are diagrams and charts illustrating its scope and work in relation to diseases and epidemics, with vital statistics, statements of comparative mortality, and the influence of density of population upon the public health. As this organization is intrusted by legislative enactment with the guardianship of the inland waters of the state, it has established an experiment station near the Merrimac river at Lawrence. Here samples of the water supplied to cities and towns are analyzed, special reports being made of the results and of examinations into methods of sewage disposal. There are also photographs, charts, filtering sands, a specimen experimental filter, and

consumed a portion of the garbage collected from the Exposition grounds and restaurants.

In illustrating the various methods for the prevention and arrest of epidemic diseases, the plan embraces compulsory vaccination and the results attending the isolation of infectious diseases, as well as measures for the exclusion and elimination of animal epidemics. In this group is fully illustrated the quarantine system of the country, and especially in the appliances used at the Mississippi river station below New Orleans. A model of its plant, which is one of the best of its class, is placed upon an elevated platform, and includes a wharf supported on piles, with a vessel moored to it undergoing fumigation. Alongside the vessel is the quarantine tug-boat, on board of which are the sulphur furnace and suction blower used in purifying the air in the hold. Pipes lead from the tug to the open hatches of the ship, whence the foul air passes through the furnace, while sulphurous acid is forced into every crevice below the decks. Along the front edge of the wharf are the pipe and a connecting system of hose, through which bi-chloride of mercury is distributed wherever a disinfecting solution is required. Along the front of the wharf is a railroad track, with a car containing a second fumigating apparatus, which can be placed opposite any hatchway where it is needed. But the most interesting feature is the method of disinfecting the



CORNER OF THE COURT



other appropriate material. Elsewhere in this section, and in a smaller pavilion or annex, are exposed the various systems of adulteration in food and drugs, with specimens of trichinæ, charts bearing upon trichinosis as existing in Massachusetts, plans of the sewage system of Boston, and photographs of the precipitation works of Worcester by chemical agencies, with views of the sewage fields in operation and diagrams of the principal filter beds constructed throughout the state.

But it is on the department of charities and correction that many of the states, and especially Massachusetts, New York, Pennsylvania, Ohio, and Illinois have concentrated their exhibits, forming together a most elaborate and interesting display. The mentally defective, the deaf and dumb, the sick and injured, the orphan, the criminal, and the pauper, all these and other classes are represented in the many institutions described on printed page, or shown in photograph and model. Of special interest are the miniature reproductions of the New York and Pennsylvania institutions, the model of the Elmira reformatory being the largest in the hall and



LOOKING TOWARD ELECTRICITY BUILDING AT NIGHT

so constructed that the visitor can not only examine the front of the structure but the arrangement of the cells and the interior plan. A ghastly object is the fac-simile of the heavy oaken chair, with its cushioned foot-rest, in which Kemmler, the murderer, was put to death by electricity.

From the empire state are pictures and charts of the Buffalo hospital for the insane, a model of the Utica asylum, and exhibits representing the Willard asylum, the Binghamton state hospital for the insane, and the industrial school at Rochester. There are also contributions from the New York house of refuge on Randall's island, from the Hebrew orphan benevolent association, the Hebrew technical institute, the St John's guild floating hospital of New York, the soldiers' and sailors' home of Bath, and the Fitch crèche of Buffalo, the last with a practical exhibit of its methods and workings in the Children's building. Among others are the Letchworth plan for an almshouse, and such establishments as the Fitch accident hospital in Buffalo, the cancer hospital for women, and the Montefiore home for chronic invalids. Accompanying these exhibits is a mass of general information presented by the state boards in charge of reformatory and charitable institutions.

The excellent penal systems of Pennsylvania are displayed to good advantage in the large and faithful models of the penitentiaries at Philadelphia, Allegheny city, and Huntingdon. The well known reform school at Morganza is represented by specimens of work contributed by the inmates, as also is the industrial home for



blind women at Philadelphia. A number of orphan asylums and aid societies testify to Pennsylvania's activities in this direction, while her reputation for medical science is upheld by such organizations as the Jefferson medical college and the Jewish hospital association of Philadelphia.

In the Massachusetts section there is a model of the hospital department of the state almshouse at Tewksbury, the management of which was investigated several years ago, with results that caused a profound sensation throughout the United States. Another model is that of the McLean hospital at Somerville, including



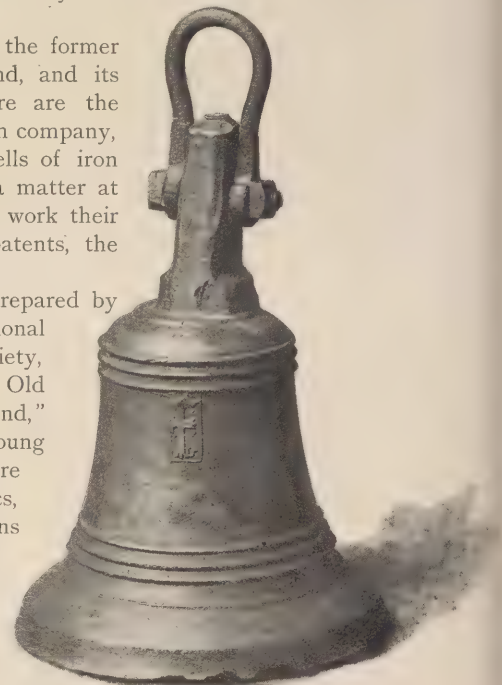
QUEEN ISABELLA OFFERING HER JEWELS

the training school for nurses, with photographs and explanatory material. The appliances used in the Boston city hospital and nurses' school form an instructive feature of their exhibit, and there are specimens of work from several industrial schools, from the reformatory for women at Farmingham, and the penitentiary at Concord junction. With these and a few other exceptions the charitable and reformatory institutes of Massachusetts are represented mainly in pictorial and literary form.

Among the western states Ohio and Illinois are largely represented, the former by its insane asylums, its girls' industrial home, its home for the blind, and its state reformatory. As to the construction of penal establishments there are the exhibits of the Van Dorn iron works, of Cleveland, and the Champion iron company, of Kenton. Here are shown the strongest locks, doors, window guards, cells of iron and steel, and all else that is needed to keep the criminal safely in jail, a matter at least as important as to keep him out of it. The firms which make such work their specialty employ their own architects and control a large number of patents, the secrets of which are closely guarded.

In the Illinois section are charts relating to crime and pauperism, prepared by an expert, and identical with those which were published in the eleventh national census. The charities of Chicago are represented by its Relief and Aid society, its Children's Aid society, by two German organizations, one of them an Old People's home, and by an exhibit in connection with the "fresh air fund," established by the *Daily News* for the care and medical treatment of young children at its sanitarium in Lincoln park. From the school of agriculture and manual training at Glenwood is also a display of photographs, statistics, and specimens of work. Baltimore sends a model of the Johns-Hopkins hospital and illustrates the workings of its training school for nurses, while from other cities and states, and even from individuals are exhibits which attest their interest in this department of the Fair.

In the gallery of the Anthropological building are the sections devoted to natural history, history, and anthropology, the exhibits in the last



FIRST CHURCH BELL IN AMERICA



of these divisions being installed in a series of laboratories. Here are also the offices of the department and a number of miscellaneous groups. Occupying the entire southern aisle is the collection from Ward's Natural Science establishment, of Rochester, New York, in the centre of which is the Siberian mastodon, reproduced from the royal museum at Stuttgart, 16 feet high and with curved tusks six feet in length. Among the remains of mastodons taken from the ice near the mouth of the river Lena, during the eighteenth century, were portions of skin covered with long, coarse hair. Thus, with the skeleton reconstructed, scientists were enabled to clothe it as here represented in its natural state. Near by is the huge frame of a plesiosaurus, 22 feet long, the original of which was unearthed from English soil. The ichthyosaurus, the megatherium, the gigantic elk of Ireland, the wingless moa from New Zealand, the armadillo from Montevideo, and other evolutionary forms of bird, beast, and fish are also displayed in skeleton form or as casts, many of the latter taken from the British museum. Suspended from the gallery ceiling is the skeleton of a whale, and elsewhere a huge octopus with arms outstretched as if to seize its prey. Other specimens there are, from those of mammals, especially deer, elk, and moose, largely from Maine and Colorado, down to trilobites, corals, and crustacea, together illustrating the progressive forms of animal life through many geologic eras.

Of fossils the most valuable collections are from Nevada, Wisconsin, and Indiana, and especially from the first of these states, which shows specimens unearthed in the deepest levels of its mines, some of them



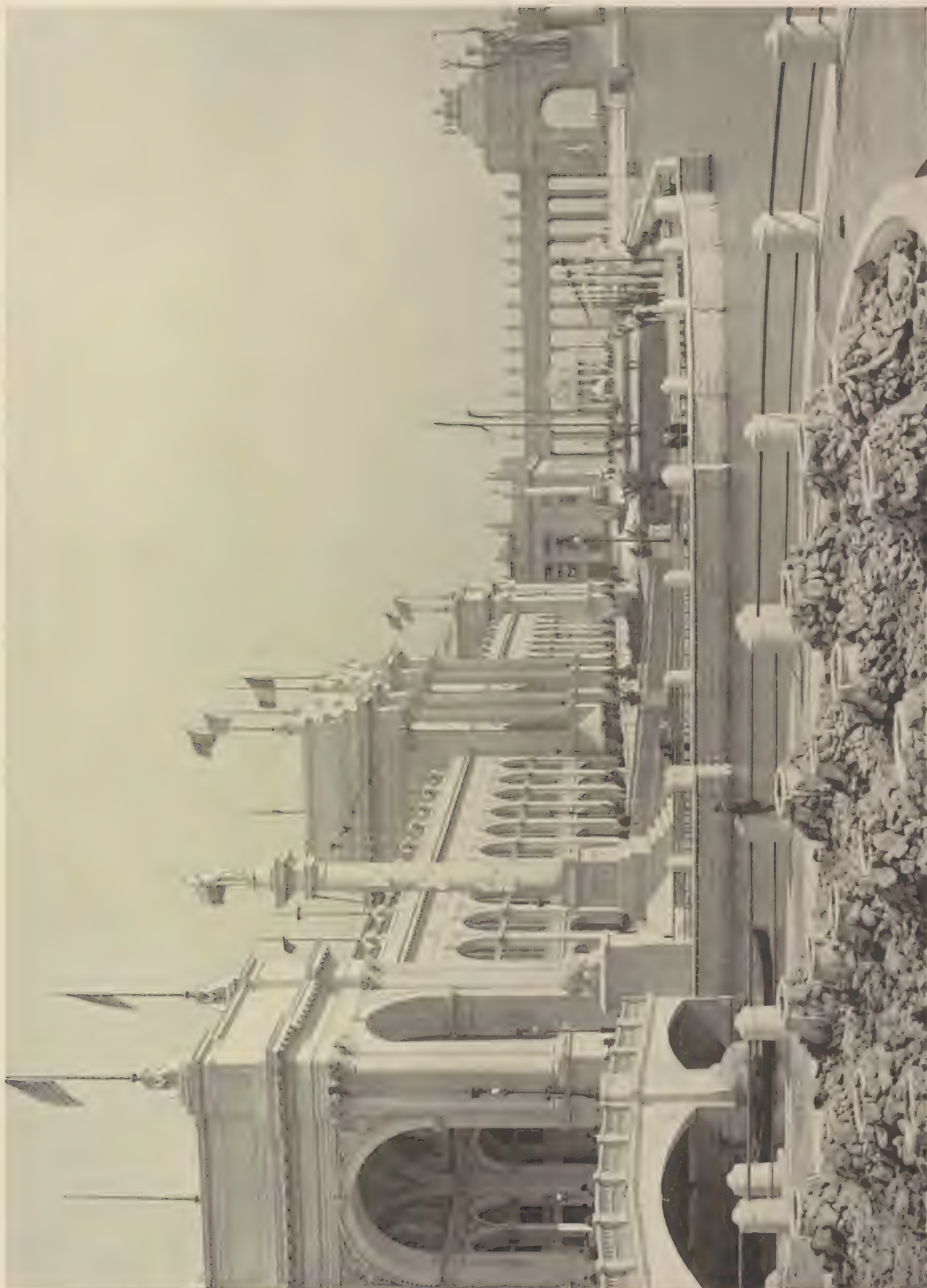
COLUMBUS' RECEPTION AFTER HIS FIRST VOYAGE

from strata 2,000 or 3,000 feet below the surface. Of special interest are the footprints found at Carson in a Laurentian formation of the azoic division of rocks, a granitoid gneiss, in which no traces of life had before been discovered.

In the eastern aisle is fully illustrated by state, individual, and foreign exhibits the fauna of the present and recent periods, grouped in a series of exhaustive and interesting collections. From the New York state museum is a display of mammals, large and small, including life-like specimens of elk and buffalo, and an assortment of land and fresh-water shells. An Albion naturalist has cases of birds' eggs and a number of delicate wall pieces showing the manner of nesting, one of them representing a family of ruffed grouse, the mother carefully guarding the eggs, with a brood of little ones half hidden in the grass.

A group of moose heads is a prominent feature in the Ontario section, and close at hand is a family of otter, one of them in the act of devouring a fish, the latter the work of a New York taxidermist. On a mass of rugged rocks are displayed the birds and mammals of Pennsylvania, the birds among bushes or perched upon branches of trees, a black bear protruding his snout from a cave, and squirrels, otter, mink, muskrats, and other animals, all in their natural habitats. The Agassiz association, of St Louis, Missouri, illustrates its work in promoting the study of natural history, and among private contributions is a collection of moths and butterflies gathered from every quarter of the world. Here also the government of Brazil has a small exhibit,





SOUTH FRONT OF MANUFACTURES BUILDING, WITH SECTION OF PERISTYLE



in which are the crouching cougar, leopard, baboon, boa-constrictor, and various birds of bright plumage and discordant voice.

As to the contents of the northern gallery, they are thus described by the chief of the Anthropological department. "Here," he says, "is a large collection of instruments and apparatus, received from the more important anthropological laboratories of the universities in this country and from several in Europe, with a very interesting series of apparatus made especially for this exhibit by the principal makers in Europe and the United States. The laboratories are divided into three sections—physical anthropology, neurology, and psychology. In these laboratories the practical working of the apparatus is shown, and any one who wishes can have various tests applied, and can be measured and recorded upon cards, which are given to the subject upon the payment of a small fee, while the record is made upon the charts and tables hanging on the walls of the laboratory to illustrate the various subjects. Here, too, is a series of skulls and skeletons and various models showing the physical characteristics of the various races and varieties of man. An interesting series of charts in the physical-anthropological section is that illustrating the development of over 90,000 school children in various



VISTA FROM WOODED ISLAND

cities of North America. Another series of diagrams and maps shows the physical characteristics of the Indians of North America, as derived from measurements and observations upon 17,000 Indians, recorded by about seventy-five assistants of the department, who were engaged for nearly two years in this work. One of the alcoves is devoted to the Sargent models of the typical man and woman and the anthropometrical work illustrating physical development. Another alcove is devoted to the anthropological library formed by the department, and on the walls are the plans and photographs of several of the principal anthropological museums."

Elsewhere is a variety of groups, consisting largely of collections of coins and postage stamps. From a Russian contributor comes a private collection of the rare ancient coins from his native land, with others belonging to the classic era of Greece and Rome. Clocks of an early date, ancient and modern weapons, and antique metal work and ornaments fashioned by the Norse colonists of Iceland are also among the individual displays. Coming nearer home, Pennsylvania and Ohio have exhibits relating to the history of the republic. From the former is a model of the Yorktown court-house of revolutionary days, and the latter reproduces the Campus Martius of Marinette, the pioneer settlement of the west.

Bearing more directly on the Columbian Exposition than any of the collections within the hall of Anthropology are those which are stored in a monastic edifice elsewhere in the grounds. As the visitor passes from



the central court toward the pier which extends into the lake, he observes at the extremity of a rocky headland on his right a gloomy, odd-looking structure, with belfry and tower, with small, dark windows let into plastered walls, and heavy, cumbersome doors, its sombre aspect somewhat relieved by a roofing of red tiles. The building and its immediate foreground are reproduced from the monastery of La Rabida, within a league of Palos, where Columbus, asking for a morsel of bread and a cup of water for his boy, Diego, was invited to

make his abode, and matured the plans which gave to Spain her New World empire.

Rich in historic interest is this little hamlet of Palos, once a flourishing port, but now a dilapidated village, with a few short grass-covered streets, deserted by all except for a few fishermen and farmers, its waters so low that only the smallest craft can reach the rush-grown harbor whence the Columbian flotilla set sail toward the unknown. Here are still

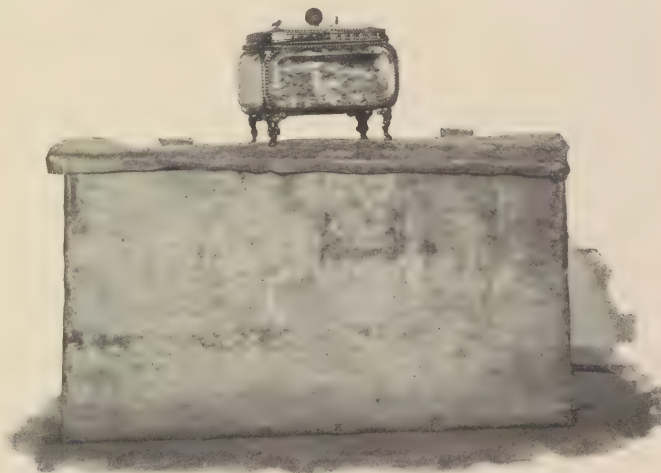


CONVENT NEAR SEVILLE

pointed out the ruins of the house where the Pinzons dwelt, and on a hill in the outskirts of the village is the Moorish mosque, converted into a church, where in May, 1492, the alcalde Rodriguez Prieto read from his pulpit the mandate of the Spanish sovereigns, ordering the people to furnish and equip two vessels for the use of the expedition. Of this mandate or proclamation the original is shown in the chapel of La Rabida at Jackson park.

Apart from the interest which attaches to La Rabida because of the Columbian episode, there are other historic associations dating back to the second century of the Christian era. While the emperor Trajan was sojourning at Seville occurred the death of his daughter, Proserpine, whereupon the governor of the province, to secure his favor, erected a temple where now the convent stands, and placing on its altar a golden image of Proserpine, offered pardon to all offenders who should seek the protection of its shrine, bidding his people here to hold festival on each recurring birthday of the Cæsar's child. During the decadence of the Roman empire the temple passed under the control of the Christians, who, assimilating this festival with their own ceremonies, gave to it the name of the Candelaria or Purification. An image of the virgin, a gift from the bishop of Jerusalem, carved, as the legend relates, by Saint Luke, and possessed of miraculous powers, was replaced by the Moors with a bone of Mohammed, which remained on the altar until their expulsion from the western seaboard. In the twelfth and thirteenth centuries the monastery was occupied by the knights-templar, who decorated its walls with classic paintings of considerable merit. After the monks returned to its cloisters, the prior ordered that a coat of white plaster be laid upon them, lest the meditations of the brethren be diverted by these nude figures of Venus and Juno, of Cupid and Bacchus. When Columbus arrived at La Rabida it had but recently come into the possession of the Franciscans, to whom, on the 12th of October, 1492, Isabella of Spain gave a deed conveying all rights and titles.

Such, in brief, is the history of this famous convent, the full title of which, rendered in English, is The Monastery of St Mary on the frontier. In the reproduction is the exact appearance which it presented in the days when Columbus accepted the hospitality of the fathers; for to this condition the original was restored by the Spanish government. The task was intrusted to Señor Velasquez, a trained and skilful architect, a man of artistic tastes and archæological lore, one thoroughly conversant with the religious and historic associations connected with his subject. By a lieutenant in the United States navy, engaged in constructing the Columbian caravels, the plans and drawings of Velasquez were secured for Exposition purposes, and the result was the building already described.



CASKET AND CHEST, CONTAINING COLUMBUS' DUST AND BONES





HOUSE IN WHICH COLUMBUS DIED

A well-known author and naturalist was sent to the West Indies, with instructions to follow in the track of the discoverer, and with photographic apparatus for taking views wherever he might find a subject; another performed the same duty in Spain; by the United States consul at Genoa representations were secured of the birth place and early career of Columbus, and by a man-of-war were visited the site of Isabella and the spot where the *Santa Maria* was wrecked. From ministers and consuls many treasures were secured, with loans from foreign collections both public and private, and assistance from those who had made a special study of early American history.

The exhibits in the first section are intended to explain the condition of geographic science at the time of the discovery. Among them is a fac-simile of Martin Behaim's globe of 1492, on which is represented about all that was known of the earth's surface at the time of the first Columbian expedition. There is also a group of maps and charts showing the growth of geographic knowledge from the days of Ptolemy, the father of geography, with copies of his works and those of other writers of his age. There is a reproduction in bronze of a celestial globe of the eleventh century, and of Arabian make. There is a crusaders' map of the thirteenth century on which is indicated the route from London to Jerusalem, with other maps and charts from the thirteenth to the sixteenth centuries. There is a portrait of Marco Polo, with a copy of his book of travels with some marginal notes made by Columbus during his several voyages. There are evidences of pre-Columbian discoveries, especially those of the Norsemen, with a picture of a ship such as that in which, in the tenth century, Leif Erikson voyaged from Greenland to Vinland. Of exceeding interest are the copies of documents furnished by Leo XIII from the secret archives of the vatican, where 14,000 volumes were examined as to the claims of Norsemen to the discovery of America. While these claims were not substantiated, it was proved that a catholic bishopric existed in Greenland as early as the twelfth century, and that to the east of it were regions peopled by savages.

Another section, relating to the court of

The project for the historic collection of La Rabida was submitted to congress and the board of directors by William E. Curtis, chief of the Latin-American bureau and director of the bureau of the American republics. It was favorably received; was endorsed by James G. Blaine, the secretary of state, and largely through his efforts a portion of the funds set apart for the government exhibit was devoted to this purpose. Then the chief set himself to work, intending, as he says, to gather every existing relic of Columbus; the originals or copies of every picture, statue, and monument relating to Columbus and the history of his career, with all the rare manuscripts, books, and charts pertaining to the discovery and early settlement of America.



THE POPE AT THE TIME OF THE DISCOVERY

Ferdinand and Isabella, contains portraits of the latter as a child, as a queen, in the armor which she wore at the siege of Granada, and in the act of accepting its capitulation. There are also fac-similes of her golden sword, her sceptre, crown, and treasure-chest, with the original of her will executed at Medina del Campo on the 23d of November, 1504, the day before her death. Other portraits and statues are of Ferdinand as a boy and in middle age, of their son, Don Juan of Aragon, of their daughters Isabella and Juana, of Charles V, Phillip II, and Alfonso XII. In models or in graphic art are represented the castle of Medina del Campo, the city of Santa Fé, the tomb of Ferdinand and Isabella, the Alhambra, the surrender of Boabdil, and the Torre del Picos through which the Moorish sovereign rode when about to deliver the keys of his castle and palace.

A third section is devoted to the birthplace, parentage, and boyhood of Columbus, with pictures of every place and scene with which he was identified before his arrival in Spain. There are views of the city and harbor of Genoa, of the house and street in which he is said to have been born, and the home at Quinto



LOOKING FROM THE ADMINISTRATION BUILDING

where his father and mother lived and were married. The village of Cogoletto is also shown, and the street that fronts on its beach, where is an ancient structure with the following pretentious inscription: "Traveller stop at this place. It was here that Columbus, the greatest man in the world, first saw the light; here in this humble house! There was one world: this man spoke, and there were two." There are views of the university of Pavia where he studied; of the church at Lisbon where he married; of the Madeira islands and the houses in which he lived at Funchal and Porto Santo, with a table and a cane made from the timber contained therein, and the door, doorstep, lock, and key taken from one of these dwellings.

Then follows the history of Columbus in Spain, with pictures of the original monastery of La Rabida, and some of the bricks and tiles that were used in its construction more than sixteen centuries ago. In a series of photographs or copies from celebrated paintings, are shown the places where he lived or visited, with all the varied incidents of his career. There is Columbus asking alms at the monastery gate, in consultation with Father Marchena, before the Dominicans, the junta, and the council of Salamanca, at the court of Isabella, recalled at the bridge of Pines, and receiving from the queen the offer of her jewels. Other views are also identified with the story of his life, as of the cell in which he lived at La Rabida; the city of Cordova, its mosque, and its old Roman gate near which he sojourned for several months; the town of Palos, its church of





INTERIOR VIEWS OF LA RABIDA

which he carried on his flagship, found in the ruins of the stockade after its destruction in 1493, with other relics gathered in its neighborhood. Of Watling island there are several sketches, including the spot where Columbus is said to have landed; its coast, its lagoons, and interior; its lighthouse, Baptist chapel, and magistrates residence; its farmers and fishermen, the former still earning a scanty livelihood by raising meagre crops of grain and vegetables. From an old print is shown the island of San Salvador as described in the journal of the discoverer. There are also views of St Mary of the Azores; of Lisbon from the point where Columbus landed in 1493; of Barcelona and his reception there by Ferdinand and Isabella; of the wonders which he described, and of Hogarth's rendition of the oft repeated story of the egg.

Pertaining to the second voyage are many views of Isabella, or rather of its ruins, whence and from its neighborhood were transferred to the convent at Jackson park all the relics worth preserving, even to the stones of which its ancient church was built and the Moorish tiles and pieces of metal which the Spaniards brought with them to their first settlement in the New World. There are also fragments of armor, lance-heads, horse-shoes, stirrups, and spurs, with an iron cross of antique design and a hawk's bell used for trading with Indians in exchange for gold. But most interesting of all is the church bell which Ferdinand presented to the infant colony, the first one that proclaimed the glad tidings of salvation offered at the point of the sword. Quite a history of its own has this so-called "bell of the fig tree," on the surface of which are the initial letter of its donor's name and an image of St Michael, the patron saint of its sanctuary. Removed to La Vega in 1494, with everything else that was removable, when gold enticed the Spaniards into the mountains of Cibao, it was hung in the tower of the chapel, and there remained, until, seventy years later, the town was destroyed by an earthquake. For three centuries or more it lay amid the ruins, from which it was unearthed by a shepherd beneath the vine-covered masses of debris that buried the church and its bell. Thence it was taken to a church at Santo Domingo, where ever since it has been regarded as one of its most precious relics.

The third voyage is illustrated in many paintings and photographs, as of the Boca del Drago near which Columbus first set foot on the mainland, and thence turned northward, his system racked with the gout and his eyes almost sightless from exposure and want of sleep. The anchor is shown which he cast off the island of Trinidad on an August night of 1498, when a wall of water from the estuary of the Orinoco threatened destruction to his ships. While digging a trench on a coconut plantation near

St George, and the tavern where he rested midway on his journey from the convent.

In the following sections are illustrated his several voyages and the incidents and associations connected therewith, from his leave-taking with Father Marchena in 1492 to his shipwreck at Christopher's cave in Jamaica in 1504. Relating to the first of these voyages are valuable charts presented by the historian, Rudolph Cronau, with pictures loaned by Spain, Germany, and France, and one by the Italian artist, Gabrini representing his landing at San Salvador. The caravels are reproduced and the departure from Palos, the mutiny at sea and the first cry of land. In photographic form are shown the points at which he touched in Cuba and San Domingo, with the site of the Indian village of Guarico, where the wreck of the *Santa Maria* was brought ashore, from which the admiral built his fort of Navidad. There is also the anchor



MOSAIC PICTURE OWNED BY VATICAN





LOOKING NORTH FROM WOODDED ISLAND



Icaques, where the land has encroached on the sea, this anchor was exhumed many years ago, by a party of laborers, probably from the spot where it was lost. There is the autograph letter of Francisco Roldan which caused the disgrace of Columbus and brought him home in shackles. There are pictures of Columbus in chains; of the chains themselves with the inscriptions thereon; of the citadel and cell at Santo Domingo where he was imprisoned by Bobadilla, and a splinter from the beam to which he was fastened in his dungeon. There is a copy of his famous letter written from Cadiz harbor to the nurse or governess of Prince Juan, in which the great admiral bemoans his fate as one who "has now reached the point where there is no man so vile, but thinks it his right to insult him." Finally is shown his reception by Isabella, of which Oviedo writes: "The queen burst into tears and Columbus fell sobbing at her feet. She took his hands and led him to a seat, and when able to control his emotion, he recited at length the wrongs and humiliations he had suffered in her service. Ample restitution was promised; but there is no evidence that Columbus ever received anything more than sympathy."

As to his fourth and last voyage there are pictures of all the places which he visited, with others illustrating the popular ideas of the time concerning New World inhabitants. Among them is a view of Santo Domingo, where for his tiny caravels, about the size of fishing-smacks, he asked in vain for shelter from an approaching storm. A photograph shows a street in Trujillo, near the spot where Columbus landed while following the shore line, still in search of a western passage around the world. But now his strength had departed from him, and all that remained was a shattered constitution, a failing intellect, and an iron will. Nevertheless he persisted, exploring the entire coast of the Isthmus until its unbroken barrier mocked at his life-long effort and forced him to abandon a project dearer than life itself.

On the site of Trujillo he had purposed to found a colony; for here were signs of gold; and leaving there his



MOSAIC WORK IN LA RABIDA

brother Bartholomew with a sufficient force, was about to set sail for Spain, when the embryo settlement was exterminated by Indians and the survivors taken on board the caravels. The Indian huts are reproduced as Columbus found them, as also are the stronghold built by Cortés in 1526 and the chapel erected there in 1540. A scene on the river near Trujillo shows where his men did battle with the natives, and one on the Rio Dulce, in Guatemala, where his vessels went ashore. There are views of Puerto Bello, where a band of his colonists, left to espy whence the Indians gathered their gold, found only a nameless grave. The fight with Porras on the coast of Jamaica and the shipwreck at Christopher's cove are illustrated, and there is the "Lettera Rarissima di Cristoforo Colombo," in which are painfully apparent his broken spirit and his tottering reason. "I was twenty-eight years old," he says, writing to the king from Jamaica, "when I came into your Highness' service, and now I have not a hair upon me that is not gray; my body is infirm, and all that was left to me, as well as to my brother, has been taken away and sold, even to the frock that I wore, to my great dishonor."

Still other sections are devoted to the last days of Columbus, his death and burial, to relics not classified in other divisions, and to the literature of the discovery. Engraved on copper, in 1580, is a view of the city of Seville, with the admiral's house and a cross made of New World gold. There is the convent of Cartuja, where returning from his final voyage he sojourned for a season with Father Corricio, spending his time in bemoaning his misfortunes and writing incoherent letters. A fac-simile of an autograph page from his *De las*

*Profecias*, the manuscript of which is in the Columbian library at Seville, belongs to an unpublished work attempting to prove that his discoveries were prophesied in holy writ.

But let us turn aside from these last sad days, these mournful evidences of "a mind diseased;" for now his end was near. Of the death of Columbus at Valladolid, and the house in which he died, there are copies of pictures by Ortego, Robert Fleury, Carlos Lira, and others, one of them a large oil painting hung in the corridor. Here is shown the building, at that time used as an inn, where on the 20th of May, 1506, he breathed his last, with none at his bedside, so far as is known, save for his brother Bartholomew. It is a plain unpretentious structure, still almost intact, and over its doorway hung, until recent years, a sign announcing the sale of *Leche de burros y vacas*—that is to say, of cows' and asses' milk. As to this event the chroniclers of the age are singularly reticent; nor was there even official record, until on the back of one of his appeals to the king, received many days after his decease, was endorsed by a clerk the simple legend: "The within admiral is dead." Thus unhonored passed away the man whom all mankind has honored, and never more so than on this the fourth hundredth celebration of the greatest achievement recorded on history's page.

In graphic art are reproduced the chapel of the convent at Cartuja, where his remains were laid at rest, the cathedrals of Santo Domingo and Havana to which they were removed, and in fac-simile are his leaden coffin and its enclosing urn. There are photographs of his bones and portions of his dust, the latter in locket and crystal case. Of his brothers, his son Diego, and certain of his descendants, including the present duke of Veragua, there are autographs and portraits, and prepared by the duke himself, whose parentage and ancestry are freely represented in pictorial form, is a diagram tracing the lineage of Columbus down to the present day.

Among the Columbian relics contained in a special section are copies of several of his formal, autograph letters and documents, of which more than sixty are still preserved; for Columbus was a voluminous writer, and as the court jester of Charles V remarked, "He and Ptolemy the geographer were twins in the art of



IN THE VATICAN COLLECTION

blotting." His coat-of-arms is shown, with the original decree which granted it, a photograph of his breviary, or of what is supposed to have been his, and some of the actual coins, of which about a score are still in existence, fashioned, as is said, from the gold which he brought with him from Española. There is a photograph of the votive offerings which he left on the shrine of the virgin at Siena in northern Italy, and as a loan from the national museum at Washington is one of the bolts to which he was chained in his dungeon at Santo Domingo.

As to the literature of the discovery there is here reproduced the title page of a letter published in pamphlet form in 1493, a few months after Columbus' return to Palos. On his homeward voyage he wrote two accounts of the expedition, one of which was rendered and printed in Latin; but this priceless manuscript, after serving its purpose, was probably thrown away as useless; for it has never been found. It was but a tiny pamphlet, without the least attempt at ornament or even an initial letter; yet it passed through several editions the first one containing only eight pages with thirty-four lines to the page. Translated into English the title reads in part as follows: "Letter from Christopher Columbus, to whom our age oweth much, concerning the

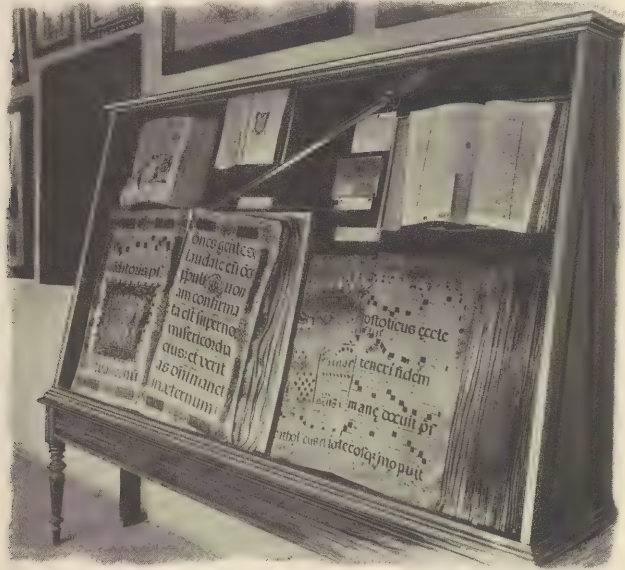


islands of India beyond the Ganges, recently discovered, in the search of which he was sent eight months ago under the auspices and at the expense of the most invincible King of the Spains, Ferdinand. Addressed to the noble lord Rafael Sanchez, treasurer of the most serene King, the year one of the pontificate of Alexander VI." Of this edition only three copies are known to exist, one in the British museum, another in the

Royal library at Munich, and the third in the Public library at Boston, purchased at public sale in 1890 for the sum of \$3,000. Of other editions there are copies in various institutions and a few perhaps in private hands.

A second description of the voyage and its results was addressed to Luis de Santangel, and of this a copy of the first edition, printed at Barcelona in 1493, and said to have been found in Spain in 1889, was secured by the Lenox library of New York. The printed matter, which is in black-faced type, is contained on two leaves of the coarsest of paper, and to these others have been stitched, preserving the copy in good condition after four centuries of time. On one of the outer pages is a brief biography in manuscript of Saint Leocadia, one of the martyrs put to death at Toledo in the year 304.

Of the second voyage a narrative is shown in a ten page Latin pamphlet printed at Pavia in 1494, of which only two copies are known to be extant. As a loan from the congressional library is one of the three existing copies of a sermon of Bishop Carvajal delivered



ILLUMINATED MANUSCRIPT IN VATICAN COLLECTION

and published in 1493, in which, passing in review the reign of Ferdinand and Isabella, he places first among its achievements the discovery of the western world. A photographic copy shows the famous bull of demarcation issued in May of the same year by Alexander VI. Another contribution from the library of congress is the first drama relating to America, published in 1494. One of the treasures of the collection is the original of the Da Vinci map, showing as islands Florida and Newfoundland, with an imaginary passage westward to the ocean north of the coast line of South America. This is from the library of Queen Victoria, while from the Spanish government is the original of Juan de la Cosa's chart of the West Indies drawn on an ox hide in 1500.

In a modern reprint is the Guiliano Dati poem, a metrical translation of the Santangel letter by the bishop of Saint Leone, and in the sorriest of doggerel. Among other works are *Cosmographiæ* by Peter Apianus, a life of Columbus by his son Fernando, a history of the voyage of Magellan, the first three English books on America, a translation of the log book of Columbus, and one of the first sketches of his life, bearing date



SOUTHEAST END OF THE WOODED ISLAND

1516. Of his first portrait there is a wood-cut from the original painting in possession of the bishop of Norica, and there is a rude wood-cut showing the natives of the West Indies preparing for a cannibal feast, this being the first pictorial illustration whose theme is the aborigines of America.

In two chambers of the upper cloister is a collection of pictures and books relating to what is termed the christening of the continent, showing how America received its name. Another section is devoted to the

conquests of Mexico and Peru, and still others to the original papers of or pertaining to Columbus, including his commission from the crown, with many of his letters and those from the sovereigns of Spain and Portugal. Finally there is the vatican exhibit and a contribution from John Boyd Thacher relating to the discoverer and his discovery. In the former is a picture of "St Peter Weeping," after Guido Reni's masterpiece, the execution of which was a six years' labor of love. Others have for their subject "The Prophet Isaiah," "The Roman Forum," and "Theology," the last a copy, is from Raphael. The pope is shown in the act of blessing the people,



SECTIONAL VIEW OF THE FAIR

and by Chatrau is a portrait of Leo XIII, as a token of his interest in this department of the Exposition. There is the Borgian map of America by Ribero, finished in 1529 presumably for Charles V. To the same date belongs the Ribero vellum chart of the old and new world. There are also several letters and bulls from the chief pontiffs, the oldest of them being from Nicolas V, an epistle of the 20th of September, 1448, and relating to the condition of the church in Greenland.

WORLD'S FAIR MISCELLANY.—To William E. Curtis, chief of the Latin-American bureau, I am indebted for a valuable dictation on the monastery of La Rabida and its contents.

The ruins of Yucatan, discovered several years ago by E. H. Thompson, resident consul at Merida, were partially reproduced, as I have said, to the north of the Anthropological building, with a mechanical imitation of tropical verdure. For the latter purpose a pulp mixed with vegetable fibre was used, the base of which was a thick, tough paper, and this was hammered into every crevice of wall or sculptured figure. Seventeen months were thus spent by the consul and his Indian assistants before the casts were ready to be shipped to Chicago, and reproduced in staff. The ruined city of Uxmal, from which the most interesting sections of architecture were copied, is situated in the southeastern portion of Yucatan, more than 100 miles inland. Perhaps the most striking feature in this collection was the façade of the temple which showed the figure of the great feathered serpent, the ancient god Kukulkan.

Immediately west of the Anthropological building, in what appears to be a massive cliff of reddish brown, is represented Battle Rock mountain, a weird and solitary landmark of the desert of southwestern Colorado. Here are the so-called Cliff palace, Balcony house, and other abodes once inhabited by the cliff-dwellers. A museum shows in fac-simile their pottery, weapons, implements, ornaments, clothing, and mummies, as found by exploring parties. There is also a cave filled with oil paintings reproducing other features in these prehistoric settlements, while at the base of the hill outside are small herds of deer, mountain sheep, and burros, browsing on sage-brush and yucca as in their native country.

Among rare archaeological specimens are the hand of Buddha, webbed up to the middle joints of the fingers, and the fragment of a temple frieze, found a few years ago by an officer in the British army, in the northern portion of India. Portions of other friezes have been discovered in the same locality and deposited in the British museum; but the figures upon them represent war, hunting, or athletic sports.



The central figure of the fragment here exhibited is that of Buddha holding in his hand the sacred lotus. A statue of Demosthenes, also reproduced in this department, was discovered in the country between the Swat and the Indus. It is supposed that the sculptor accompanied Alexander the great on his campaign into this part of Asia, and the work would thus bear date about 330 B.C.

What is claimed to be the largest piece of lapis lazuli in the world was displayed in the Anthropological building. It was found in one of Bolivia's ancient tombs, is of beautiful color, and 30 by 18 inches in dimensions.

On the eastern shore of the south pond are groups of huts which, with their inmates, form a most interesting exhibit in the ethnological department. In the largest cluster is illustrated the daily life of the British Columbian and Alaskan Indians, their hideous totem poles standing in front of their village. Some of the poles supported the roof beams, and have carvings upon them of tribal significance. On one of the front posts of a hut occupied by the Nanaimo Indians, of Vancouver island, is the spirit of the sea called Squa-eque, and upon the rear post, a figure explained as "a man holding a goose." Another heraldic column has a raven upon its upper portion, and below, the spirit of the sea, whose open mouth forms the doorway. Through the legs of grizzly bears the visitor passes into other dwellings. The mythical thunder bird is perched over the door of the structure occupied by the Kuakiutl Indians, and on either side is a painting of the sun. Upon the totem poles of the Haidas and some of the Alaskan tribes are gigantic figures of sparrow hawk, wolf, eagle, bear, and frog. Moored to the shores of the pond are two long canoes, such as the Indians of Vancouver use on their hunting or fishing excursions. In all the totem-pole villages are Indians and their families, living as they do at home. Near by are represented, in a reproduction of the council-house of the Iroquois, the historic six nations of New York. The building is of bark, and in rear of it is the typical stockade. Within are chiefs of the Senecas and Onondagas, the latter being the keeper of the ancient council fire. There are also the wampum keeper of the allied tribes; their grand sachem, Colonel Eli S. Parker, one of General Grant's officers; a descendant of the famous chief, Cornplanter, and a proud looking little red man, well along in years, who claimed to be in his day the champion runner of the world, having made a won-

derful record before the prince of Wales about a half a century ago. Accompanying these notables of the male sex are several well-favored women, attending to household duties or offering for sale the products of their labor and skill.

Near the council-house of the Iroquois are several teepees of birch bark, in which live about a dozen Penobscot Indians, a remnant of a once powerful tribe, now reduced to a few hundred members, living on Indian island, or at Old Town, on the Penobscot river. The Crows have also a lodge of skins, colored with red and yellow ochre, and five Navajoes occupy a log hut covered with sod.

North of this ethnological exhibit, organized as an illustration of the primitive life of the aborigines, is shown the reverse side of the picture. During the term of the Fair, Indian boys and girls whom the government was educating at different institutions in New Mexico, Kansas, Indiana, and Pennsylvania, were sent to the model school of the Exposition. Of these and the attendant exhibits mention has been made in the chapter devoted to the government exhibits.

In the Anthropological building, one of the assistants in the office of the chief of department was a tall, sinewy, finely-featured, full-blooded Apache named Antonio. He was born somewhere in the Sierra Madre mountains, Arizona, and when a child was captured during the government campaigns of 1877 against the famous chiefs Geronimo and Cochise, of whom he is a relative. Taken to Fortress Monroe, he afterward went to Europe on a yacht, becoming proficient in various trades and receiving his education at the night schools of New York and Boston. During the preliminary work of the department, Antonio met his employer at the Peabody museum, and was sent among the Navajoes and Apaches to collect exhibits. At last accounts, Antonio's ambition was to visit the Antwerp exposition, as the employé of some American exhibitor, and eventually to complete his education at Harvard university.



ANTONIO APACHE





LANDING BEFORE THE ART PALACE





## CHAPTER THE TWENTY-FIRST

### FINE ARTS

**I**N this era of international expositions there is perhaps no department in which their stimulating influence has been more strongly felt than in the fine arts; for nowhere else can be compared to such

advantage the productions of all lands where art has found a home. Of the frequent recurrence of these expositions, which, like the development of railroad systems and electrical appliances, are among the features of the age, one of the effects has been to give to art a more cosmopolitan character, to make each of the great expositions held since 1857 a universal school of art whence new departures might be taken, where artist and public alike might discover how much they have yet to learn, how much to unlearn.

While the display of art at the Centennial Exposition was not its strongest feature, it served, among other purposes, to give impetus to professional education, and for that reason, apart from the question of merit, it is and will be remembered. That since 1876 we have acquired a better knowledge of what constitutes real art, together with more ability to produce it, there is sufficient evidence in the home exhibition here to be passed in review. Notwithstanding its defects and shortcomings, we have now at least a school of our own, with a large and intelligent constituency among whom there is no want of culture and discrimination. Even to those whose homes are far removed from art centres, such exhibitions tend, as in other departments, to quicken the sense of comparison and appreciation, to define more clearly our position in the scale of modern achievement.

In the number, and in some respects the quality of the exhibits, none of the former collections will bear comparison with that which is the crowning artistic feature of the Columbian Exposition. Never before were there so many participants both national and individual, covering the entire realm of art, and some of whom, as Brazil and New South Wales, have found no place at previous exhibitions. While in painting and statuary it may have been excelled by the Parisian display of 1889, this cannot be said of other departments. In engravings, etchings, drawings, and architectural designs, the galleries are especially strong, and this is as might be expected, for only in these and kindred branches, all of comparatively





APPROACH TO THE PALACE OF FINE ARTS



THE NORTHEAST CORNER



modern growth, has any decided progress been made within recent years. Engraving, it may be said, is as much an art peculiar to the nineteenth century as devotional paintings were to the middle ages, one especially developed by the demand for illustrated works, publishers and readers fixing the standard of excellence in the nineteenth century, as did priests and worshippers in the fifteenth. Thus it is that progress has been rather in artistic processes than in art itself; for here is a branch in which new modes of treatment are being constantly evolved to keep pace with the exigencies of the times, and hence with a certain freshness and vigor that does not pertain to art in its highest sense. The latter, though with new tendencies and developments, has been far less progressive, the improvement being almost restricted to countries where art is still in its formative period, while in the great centres, as in Italy and France, art, whether plastic or pictorial, remains at best where it was. In architecture treated as one of the fine arts there has been perceptible progress, and of this no further proof is needed than the hundreds of scholarly and appropriate designs contained in the exhibition.



WATERWAY IN FRONT OF ART PALACE

might recall the era of Augustus or Nero." But however just may be this remark, it does not apply to all the buildings, and especially to the temple of fine arts, a gem of the purest water, and reproducing in its graceful outlines the chaste and classic features of the Ionic school, taking as the keynote of the plan the temple of Athena Polias in the Erechtheum, though with traces of the Corinthian and Doric orders. Among those who have beheld this edifice, of itself a work of art, their pleasure was not impaired by regret that within a few brief months it was doomed to demolition; for here was no ephemeral structure, but one with walls of brick; with merely a coating of staff, and with roof of iron, steel, and glass, one which after the close of the Fair would remain as among its monuments, to be used for museum purposes and for the safe keeping of the many valuable exhibits presented to the management.

The Art palace, suitably located in the northern section of the grounds and dividing the main edifices from state and foreign pavilions, is the only windowless structure of the Exposition. By the glazed ceilings a sufficiency of light is furnished, and through the structural design of the interior so modulated as to display to the best advantage the various classes of exhibits without conflict of shadow or reflection. To relieve them from monotony the exterior façades were adorned with mural paintings representing the history of art, and to give to them a play of light and shade the building was partially surrounded with a colonnade, its pillars, eight feet from the wall and nearly thirty in height, forming a covered walk or piazza extending from the central portal to the corner pavilions. To this portal broad flights of stairs, flanked by balustrades and terraces, lead from a landing place on the northern arm of the lagoon.

The general plan, apart from its decorative features, may be described as that of a continuous series of compartments, flat-roofed, sky-lighted, somewhat less than 50 feet high, and resting on a basement raised nine feet above ground, the entire structure forming an oblong, 500 feet in length by 320 in width, and covering an area of nearly five acres. At the corners are projecting pavilions of similar height, giving accent to the design. The clear stories and roofs over the several courts are fashioned with level sky-lines, and from their

Of the city of the Fair it has been well remarked by one of its artificers that in these leviathan structures architecture in its highest sense is not represented. "Rather," he says, "are they a scenic display of architecture composed of models executed on a colossal stage, and with a degree of apparent pomp and splendor which if set forth in marble and bronze



FACING WESTWARD



IN THE PORTICO

from caprice or playfulness, refined by scrupulous decorative sculpture which could be consistently recalled by historic art, so that when completed it should be fit to enshrine the figures and groups in marble and bronze, the paintings in oil, water color and fresco, the carvings in ivory, wood, and marble, the bas-reliefs, engravings, etchings, and drawings by which the century is taking its rank in history. It was a part of the scheme to make the numerous statues, friezes, and other decorations, in the round and in relief, replicas of the greatest masterpieces of Greek and Renaissance art, so that the building itself should be a museum, not of historic sculpture only, but of painting."

In the interior the fundamental plan was not, as in other buildings, a great central hall, but a continuous series in two divisions of courts and galleries, one devoted to plastic, the other to graphic art,

central point of intersection rises from a spacious rotunda to an elevation of 125 feet, and with nearly half that diameter, a dome surmounted by Martiny's heroic statue of Fame. The principal entrance-ways, in the centre of each of the main façades, are in the form of porticos, with columns of the Ionic order, and above them are attics, on the pilasters of which are figures resembling those of the temple at Agrigentum. In the middle of the end façades are similar porticos, but on a less imposing scale.

By the Exposition architect already quoted the exterior design of the Art palace is thus described: "The objects of this building seemed very clearly to invite a monumental expression, set forth in terms connected with the evolution of the highest civilizations in history, associated with the greatest triumphs of art, established by the usages of the greatest masters and formulated by the schools and academies of all nations. It was necessary that it should be pure, formal, and stately, entirely free



THE WEST WING



GUARDING ONE OF THE ENTRANCES

and each with suitable arrangements as to size and shape. On either side of the nave and its intercepting transepts are grouped the exhibits of sculpture and statuary, while from the longer courts there is access to transverse picture galleries, their outer doors opening into larger galleries, forming a continuous promenade and communicating with the corner pavilions. Thus is afforded, with excellent facilities for classification, a hanging space of about 150,000 square feet. Some 25 feet above the main floor is a gallery 40 feet wide surrounding the entire building, and over this another gallery, containing among other exhibits that of the society of Polish artists, presently to be described. In these galleries are most of the water colors, the etchings and engravings, the pastel, pen and ink, charcoal, and other drawings, the architectural themes, and the overflow of paintings in oil, the majority of which, together with nearly all the statuary, find a place on the ground floor.

To Charles B. Atwood, designer-in-chief of the bureau of construction, we are indebted for this reproduction of the purest of classic models; and if we behold with a tinge of regret its perfect outlines, its wealth of artistic embellishment, it is only that these stately colonnades, with the ornamental statuary of the building





ARCHITECTURE, MARTINY

and grounds adjacent, were not fashioned of some more lasting material than wood and staff. While the chaste simplicity of the design owes little to its decorative scheme, that little is in perfect taste, and the exterior aspect of this edifice cannot be better described than in the two expressive words which Horace applies to the Roman maiden, *simplex munditiis*.

On the frieze are figures by Martiny, works representing Sculpture, Painting, Music, and Architecture treated as one of the fine arts; between them are medallion portraits of the old masters from the hand of Olin Warner, and on either side winged female forms with floral garlands. Sculpture is the most robust of the four sisters, with opulent form of strong and massive proportions. Painting is a somewhat sensuous muse, as appears from the lines of her face and figure. Music is skilfully personified, chaste and refined as to features and drapery, and of serious aspect. Architecture is a stately personification, with earnest, thoughtful face, on which is the stamp of intellectual power. On either side of the main portals are female forms supporting the pediments, and near them lions couchant.



HALSEY C. IVES

The exhibits contained in the Art building are classified under the following groups: sculpture in marble or bronze, with models, monumental decorations, and casts from original works; paintings in oil; paintings in water colors; paintings on ivory, enamel, metal, porcelain, or other ground work, with fresco paintings on walls; engravings, etchings, and prints; chalk, charcoal, pastel, and other drawings; antique and modern carvings, engravings in medallions or gems, with cameos and intaglios, the final group being devoted to private

collections, which are distributed throughout the galleries and include some of the finest works of the great masters. For architecture as a fine art there is no separate group, this branch being included, or rather touched upon in connection with other groups, though forming a prominent feature in several of the national collections. As in other departments, the exhibition will be treated by nationalities, and without special regard to location; but among the many thousands of contributions gathered from every quarter of the world, it will be impossible here to make other than briefest mention of the more prominent works.

In the interests of the Art department, and of American artists in relation to that department, there were established, as I have said, in the principal art centres of Europe and the United States advisory committees, forming the nuclei of juries of selection. Of these committees and juries organized in Boston, New York, Philadelphia, Paris, Rome, Florence, and Munich, the members were for the most part not only artists of repute, but the most competent and impartial critics that could be found in the several branches of the profession. Competitors were required to forward their works to the nearest or most convenient point where a jury was established, New England contributors, for instance, sending their exhibits to Boston, and those of the middle states to New York or Philadelphia. Thus was afforded a wide range of jurisdiction, and the cost and delay avoided of sending to Chicago for approval scores of paintings and drawings of which only a small proportion could be accepted. Moreover foreign artists were unwilling to submit their canvases to a jury composed mainly of American critics, and especially of western critics. As matters were thus arranged the



MARTINY'S MUSIC



PAINTING, MARTINY



INTERIOR PALACE FINE ARTS



Chicago jury was little more than a hanging committee, assigning to each work its space in the order of merit as determined by the juries of selection, from whose decision there was no appeal, those marked No 1 being first provided for, and then the other classes as room permitted. In December 1892 the work of collecting was finished, and early in the following month the jurors began their unwelcome task. No sooner were the results made known than a storm of indignation arose among the thousands of unsuccessful candidates, and for several weeks the newspapers were filled with groundless charges. That mistakes were made is not denied; but *Quis judicabit ipsos judices?* Certainly it is not my purpose here to pass judgment upon the judges, whose duties appear to have been faithfully performed, and with no indications of prejudice or partiality.

To the chief of the department, Halsey C. Ives, his aids and advisory committees, is largely due the success of this rich and varied display of graphic and plastic art, forming as it does the culminating feature of an exposition which is of itself the most striking manifestation of art that the world has ever witnessed. In the United States section are the choicest works that could be obtained from the painters, engravers, etchers, sculptors, and architects of the day. In Europe the chief visited all the principal countries represented at the

Exposition, conferring with the more prominent artists, professional and amateur, with the directors of art schools and museums, with government officials and the commissioners appointed for his department. The result was that European applications exceeded by 130,000 square feet the amount of space at the disposal of the management.

Before proceeding further it may here be stated that while one of the most elaborate and attractive exhibitions recorded in the chronicles of art, it has suffered, in common with other departments, from the imposition of a tax on all articles that might



CORNER OF THE UNITED STATES SECTION

be sold for delivery at the close of the Fair. In the organic act which gave to the Exposition its government sanction it was provided that all such articles should be subject to the duty imposed by the revenue laws in force at the date of importation; that all the penalties prescribed by law should be enforced against them, and against persons who might be guilty of any illegal sale or withdrawal. Here in truth was the genius of protection, its evil genius, be it said, and no wonder that in these spacious galleries with all their rich display were lacking some of the choicest productions of foreign artists.

Of a French master of world-wide repute, it is related that when asked by one of his American brethren of the craft to send a few of his choicest canvases, he thus declined the request: "No, sir, I thank you, I do not propose to pay your government thirty per cent of the value of pictures which I can probably sell to better advantage in Paris, or to take the chances of losing them, or having them returned in damaged condition." While through the precautions of the management risk of loss or injury was reduced to a minimum, the Frenchman's complaint as to this assessment on the products of his labor was not without justification. Save perhaps for the poll tax, a relic of the dark ages, there is no more barbarous impost than that which thus was laid on Exposition works of art. As well might we tax the cardinal virtues or the ten commandments.

But to provide for a creditable display of American art was the main purpose of the department, and in this connection its chief remarks: "The position held in this Exposition by our artists, as compared with those of other nationalities, will have much to do with determining the general estimation of our art by our own countrymen, as well as by foreign visitors, for many years to come. It is therefore of the highest importance to every American engaged in artistic pursuits that the exhibits of American art work should be of the highest quality obtainable; that each example shown represent the highest achievement of the artist, and that the

collection as a whole present in a dignified manner the best productions of our native art." Certain it is that if careful selection could accomplish this end, we have in the United States galleries a worthy expression of domestic art; for of the 1,350 works which New York painters submitted for approval only 325 were accepted, while of 600 each from Massachusetts and Pennsylvania artists, 139 and 112 respectively were chosen by the juries; this for oil paintings only, which formed little more than one third of the entire collection. Western candidates fared even worse, only 73 paintings in oil being selected from 638 that were offered, with 18 out of 177 water colors.

While by no means "the best display of art from any nation," as the vainglorious among our countrymen would have us believe, the galleries devoted to domestic art contain much that is of value and interest, with more of promise yet to be fulfilled. By American visitors to the Fair none of its departments were inspected with closer scrutiny, with greater solicitude and curiosity, for never before had American art received adequate expression at an international exposition. That we could hold our own in the mechanic and liberal arts, in agriculture, mining, stock-raising, and other branches of industry was not for a moment doubted; but



in pictorial and plastic art how would we compare with the painters and sculptors of European nations, their works evolved amid the fostering influences of a civilization compared with which our own is but of yesterday? Must it not be admitted that in art as in literature we were not old enough to bear such comparison; that our brief cycles of national existence, with their recurring phases of commercial and industrial progress, have not been sufficient to afford a national perspective; that our line of horizon is too near the point of vision, and that only as personages and events recede into distance could be fully developed the ideal faculties essential to historic art, as to history itself, to poetry, and even to the higher class of fiction? But these questions we will leave our foreign critics to answer; for with a nation, as with an individual, few can judge aright their own achievements.

Of all the criticisms pronounced on the American section none were so severe as those of the Americans themselves, and while some were just, more were partially or altogether unwarranted. First of all it was objected that the pictures were too large; that here was not art in its essence but art by the acre, the average dimensions of the canvases rising far above the usual standard. To this it may be answered that, while size is not of itself a merit, the general effect of a series of large galleries, permitting a focus of long range, is better when filled with paintings proportioned to their dimensions. Then it was said that too much space was occupied with a redundancy of commonplace portraiture. Another cause of offence was the imitation of French sensationalism and straining after effect, with the florid coloring and jejune composition of modern Parisian schools. While this may be true in a measure, so that here and there the visitor would ask himself whether he was in the French or American galleries, there are many canvases which rise far above the mediocrity characteristic of



Salon exhibitions. At least it can fairly be claimed that within the last score of years there has been a decided improvement in the better class of American art, while of French art, except for the works of the great masters, it can only be said at best that it remains about where it was. In truth it may almost be asserted that this nation of artists, which has taught all the world how to paint, is itself in danger of forgetting the highest principles of art.

But from the charge of alienism the American display cannot be entirely exculpated, and especially is this true of works which take for their theme historic events and characters. Among all this collection of more than 1,000 paintings in oil there is not one of special excellence, and there are not a dozen in all, which treat of the annals of our country. The same remark applies also to our statesmen and diplomats, our drama, music, and literature, none of them finding adequate representation at the hands of our artists. Landscapes there are in abundance, which if not in the style of a Corot or a Daubigny are of unquestionable merit. There are marine and other views, faces and figures of man and beast, flowers and fruits, moonlight and melody ad nauseum. But we search in vain for anything that reminds us of the stirring episodes in our national history, of Lexington or Gettysburg, for instance, of Yorktown or Appomattox. In statuary and paintings many of our historic personages are better represented in the foreign sections than in our own, and in this, our Columbian



SPECIMEN PAINTINGS, UNITED STATES

Exposition, Columbus and his times are almost excluded from the galleries of the United States. To call attention to these defects is but an unthankful task; but as with other departments of the Fair, it is

my purpose to describe them as they are, or were, and not as we would have them to be. "Do your artists care nothing for your republic?" inquired one of our foreign visitors; and said an American, "After I had made a tour of the galleries, and compared the exhibits of European nations with our own, I felt like a man without a country."

In sculpture and statuary the United States appears to good advantage, considering the slight regard for plastic as compared with graphic art. While there are few who share Emerson's opinion that sculpture must now be numbered among the lost arts, it may be said that in its highest sense it is practically limited to the French and Italian schools, and even these are not here represented as at European expositions, so far at least as contemporary art is concerned. While from the former are many of her most finished works, including a valuable collection of casts of historic sculpture, the display has been far surpassed at previous exhibitions; and apart from ancient bronzes, Italian statuary, pretty though it be, is stamped by the trivial and inane.

Small, but full of promise, and with several works where promise and performance meet, is New England's display of statuary, which it need not be said is almost entirely from Boston, the cradle of American art. Among the best of her specimens are Alice Ruggles' bronze figure of an Italian child, "Aux bords de l'Oise," one which, though somewhat faulty in attitude, is not without grace of form and feature. By the same artificer

are plaster casts of "Young Orpheus," and "A New England Fisherman." From Henry H. Kitson comes a piece of bronze statuary whose theme is "Music of the Sea," with two plaster casts and a portrait bust in marble; but this sculptor is better known by his memorial fountain, executed for the Roger Williams park in Providence, representing the figure of primeval man in conflict with an eagle, symbolic of nature's forces. A work of unquestionable power is "The Angel of Death Arresting the Hand of the Sculptor," by Daniel C. French, a resident of New York but a New England artist. In the features and figure of death as thus personified, there is nothing of a repulsive aspect, but rather a classic dignity and repose, without the least suggestion of violence. In contrast with its stately and commanding presence is the alert and vigorous form of the sculptor, whose mallet is at once arrested by the touch of a resistless hand. In his face is no expression of fear; only of astonishment and regret that his task must forever remain unfinished, that his life and work are ended.



DEATH ARRESTING THE HAND OF THE SCULPTOR. BY DANIEL C. FRENCH

Of the contributions by William Ordway Partridge, one is a plaster replica of the statue of Shakespeare erected in Lincoln park, Chicago; and there are busts of John Russell Lowell, Edward Everett Hale, and other personages real or imaginary. In his "Head of Christ" the features are portrayed with a spiritualized beauty, but rather of Norman or Teutonic than of oriental type. Yet there is nothing of the subdued expression of power which the subject invites; it is rather the face of a dreamer, of one lacking in moral force, in a word it is Christ estheticised rather than deified. In contrast with this is Max Bachman's plaster bust of "The Son of Man," its intent and earnest features of purely classic outline attenuated by the consuming soul within. Other works by this artist are his plaster bust of a young lady, and a bas-relief of Mrs Sheldon. Wesselhøft,

sends his "Titania and Bottom;" Anne Whitney, her "Roma," and Katherine Prescott, her "Joy to the New Year, Peace to the Old;" these and a few minor studies completing the list of what New England has to show in this direction.

"Christ and the Little Child," by Thomas Ball, is a marble group whose place is beneath the central dome. Both in conception and execution it differs widely from the delineations of the New England sculptors.

It is of the conven-



INTERNATIONAL ROTUNDA OF SCULPTURE

tional type, life size, but with little else of life in its cold, emotionless expression, cold as the marble of which it is wrought. As a study in what may be termed ecclesiastical statuary it is not without merit; but it has no other merit than this. Christ is supporting on a baluster the figure of the child, to which the left hand points in application of the gold-lettered text beneath: "Whoever, therefore, shall humble himself as this little child, the same is greatest in the kingdom of heaven." But there is no love in these serene and dignified features, and the lines of drapery and figure are stiff and

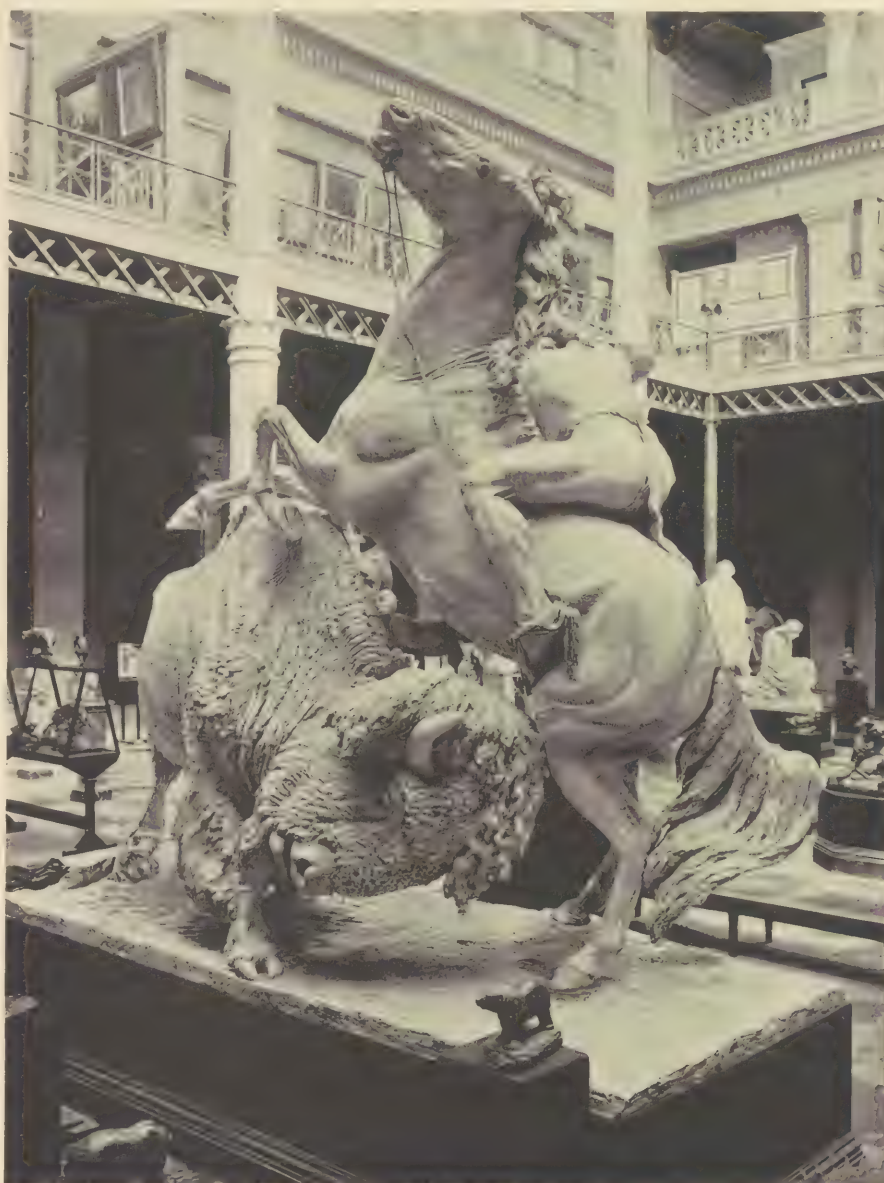


formal, precise, but almost with a mathematical precision. The same remark applies also to Ball's colossal bronze statue of Washington, and his equestrian statuette of Paul Revere.

A most vigorous composition is Gelert's "The Struggle for Work," representing three figures contending for a work ticket thrown from a factory window, with a woman and child at their feet. A brawny operative is holding aloft the ticket which a feeble and aged man is trying to wrest from his grasp, and on another side a sinewy youth is stretching his hand toward it. Admirable is the expression of pity for weakness and age mingled with satisfaction over the possession of a prize which means to him daily bread. The woman takes refuge between the feet of her husband, the central figure, holding in her arms a babe, which thus she saves from being crushed in the *mêlée*, while a boy is clutching him around the leg, himself in fear that this only chance of obtaining food will be taken from him.

Paul W. Bartlett, well and favorably known for his small figures in marble and plaster, has a bust of his wife, and a medallion portrait of Doctor Skinner. In "Bohemian and Bears" and "The Ghost Dance," he shows what he can do with more ambitious themes. The former represents a Bohemian youth teaching a young bear to dance, with another cub enjoying himself, as bear-cubs will, by rolling on the ground. Its strongest feature is the expression of amusement in the young man's face while watching the clumsy antics of his pupil, and his puzzled look as he strives in vain to find out just what his master would have him to do. "The Ghost Dance," a study of the nude and by no means a pleasing study, shows the figure of an Indian balanced on one foot, with the other raised behind him, arms extended in front and hands hanging limp, wide-open mouth, and in the features an aspect of brutish ignorance mingled with the frenzy of superstition. The muscular treatment is perfect, each thew and sinew rendered with striking fidelity, so that we almost pity the model whose posing must have suggested to him that torture and the fine arts were somehow in close relation.

"The Young Sophocles Leading the Chorus of Victory After the Battle of Salamis," by John Donoghue, is of the French school, adapting modern treatment to studies of the antique. It is not an attractive composition, and is in more than questionable taste. True, that after the battle of Salamis he was chosen to head the chorus of boys at the celebration of that victory; but one cannot imagine the great dramatist posing, as a lad, nude, and with lyre in hand. Though lads went naked on such occasions, it is not the guise or attitude that one is apt to associate with this the great master of tragedy. The figure is well enough in its way, with erect and supple carriage, head thrown back, and earnest thoughtful features; but it is not suggestive of anyone in particular, and certainly not of Sophocles, either as a youth or at any other period of his life.

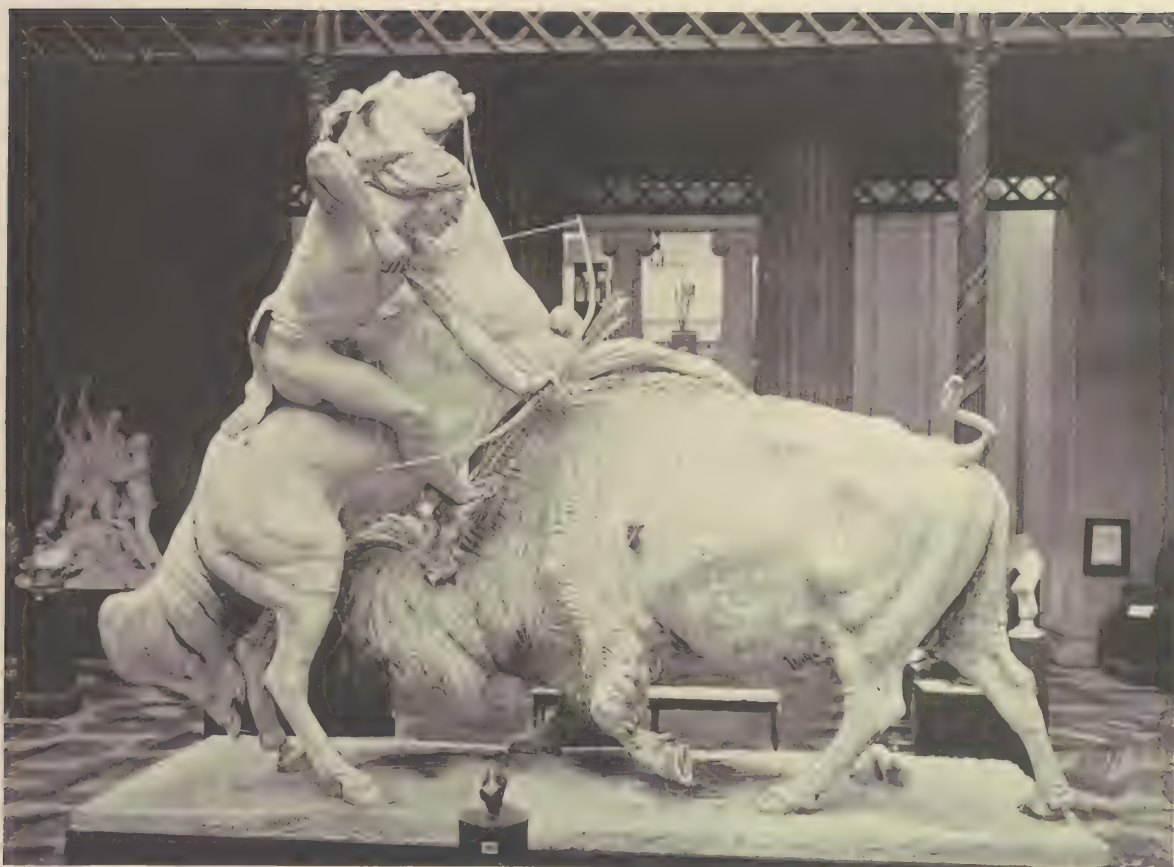


THE BUFFALO HUNT. BUSH-BROWN



THE ART PALACE FROM THE SHORES OF THE NORTH LAGOON





THE BUFFALO HUNT. BUSH-BROWN

Bush-Brown sends his plaster group, "The Buffalo Hunt," one of the strongest compositions in plastic art displayed in the United States galleries. Triebel has several of his works on exhibition, one of the best of which is a marble statue of a young boy taking from the hook his first fish. Well portrayed is the expression of mingled delight and perplexity as he tries to hold on to his slippery, squirming prize. Tilden's figures of a young acrobat, a tired boxer, and a base-ball player are truthfully delineated; but the best of his compositions is the bronze group representing an Indian bear hunt, with the brute seizing the arm of his assailant and crushing it, bone, flesh, and sinew into a shapeless mass. Among other works of merit which cannot here be noticed in detail, are Adams' "Primavera" and "St Agnes Eve;" Bringhurst's "Awakening of Spring," in terra cotta; Elwell's bronze group of Charles Dickens and Little Nell, and his marble group of Diana and the lion, symbolic of intellect controlling brute force; Rogers' plaster cast of Abraham Lincoln in seated posture; Ruckstuhl's "Evening;" Niehaus' "Athlete;" Wuertz' "Murmur of the Sea;" Dallin's portrait bust of Doctor Hamilton, and equestrian statue, "Signal of Peace," and a dozen of groups and figures by Edward Kemeys, most of them in animal sculpture.

Of painters in oil and water colors many were found worthy to represent New England art, and if among them a large proportion are as yet of



CHARLES DICKENS AND LITTLE NELL. ELWELL

only local repute, this does not detract from the merit of their works. First of all may be mentioned the pleasing and individual compositions of Edmund C. Tarbell, whose portraiture of face and figure, especially when taking for his theme the typical American girl, with her changing moods and fascinations, has won for him a foremost rank among American artists. "In the Orchard" is especially true to life, reproducing with breadth of expression and intense vivacity of coloring a summer scene where beneath orchard foliage is a group of comely maidens engaged in converse during an afternoon's repose. The picture is full of cheerful, wholesome life, of freedom from care, of smiles and sunshine. "Girl and Horse" by the same artist represents a young woman standing by the side of her saddle-horse as he drinks from a roadside watering trough. In "My Sister Lydia" is a portrait which shows to excellent advantage his skilful treatment and freedom of execution.

In different vein is the portraiture of Frank W. Benson, a Salem artist, whose "Portrait of a Lady in White" and "Girl with a Red Shawl" are greatly admired for their delicacy of style and purity of sentiment. I. H. Caliga, an acknowledged master of his art, is represented only by a full length portrait of a Brookline lady by whom it was loaned for exposition, and while not unworthy of its artificer, it is to be regretted that he did not send some of his more ideal conceptions. Of the four life size portraits by Frederick P. Vinton, his "Portrait of a Lady" is remarkable for vigor and realism of execution. In Mrs Lilla C. Perry's paintings are types of childhood, such as none but those who sympathize with children could depict. "The Doll's Bath," by J. H. Hatfield, is also a pleasing subject from child life, and in his "Letter from Papa" is an excellent specimen of drawing, though somewhat cloudy of hue. Among Frederick W. Freer's portraits, his "Lady in Black," loaned by the Boston Art club, is one of the gems in the New England collection. In Stacy Tolman's "The Etcher," which is something more than a portrait, is expressed with vivid effect the artist's concentration on his work. "Carnation and Black," by Joseph De Camp, though not without promise, is faulty as to coloring and in questionable taste.

Among Sargent's portraits are two of young children, one the son of the sculptor, St Gaudens, seated in a chair while listening to his mother's reading. In both is portrayed the true expression of childhood, and with the finest touch of this accomplished but somewhat variable artist. Less to be commended is his "Ellen Terry as Lady Macbeth," a full length picture of the great tragedienne in the act of placing the crown on her head. The pose is stiff and the features merely repulsive, without the sublimated expression of evil which the subject invites. Then there is too much blending of hues in the blue and green of the drapery and in the auburn hair, such drapery as Scotch women never wore, and with tresses belonging rather to the English type of womanhood. In other of his portraits Sargent is seen to better advantage, and shows himself well worthy of his rank as one of the foremost painters of the age.

Whistler's canvases are hung in the United States section, for he is a native of Lowell, and in this country were his earlier studies, though since thirty he has lived abroad, first in London and later in Paris. Notwithstanding Ruskin's adverse criticisms as to the works of this artist, there is but one opinion among more impartial judges, and that is that they rank among the first of their class. Of his six paintings two are portraits, remarkably suggestive of character and with excellent color scheme, giving emphasis to the more salient points while minor details are not neglected. "Nocturne, Valparaiso" is a beautiful night scene, with its graceful forms appearing indistinctly amid a delicate symphony of coloring. It is a tender, plaintive subject, musical in key to him whose ear is attuned to the music of art.

Thayer has two excellent portraits of a lady, and of a brother and sister together; but his best and largest painting is the "Virgin Enthroned," where the subject is treated with tenderness and spirituality. It is not in the conventional style, but in his own original vein, as best we like to see him; for Thayer never studied in the École des Beaux Arts, and had he done so it is doubtful whether he would have adopted its technique. So with Brush's madonna, which nevertheless is a beautiful picture to look upon, revealing all the joy and glory of motherhood, the perfect love and trust of childhood. Let those who are technicians and nothing more cavil at such work, for here are qualities that cannot be overlooked, and none the less valuable that they are not in imitation of the French; for of the French school, with so many of its defects and so few of its merits, there are enough and more than enough in these galleries of domestic art.

Much admired are J. M. Stone's "Leukopis" and "A Summer Dream," the former a half-length figure of a girl with the pure complexion and chiselled outline of feature which sometimes gives to the well favored among American damsels almost a classic mold. Both figures are somewhat scantily draped, with flesh tints



CORNER IN NORTH GALLERY



sufficiently pronounced, "A Summer Dream," representing a brown-haired maiden lost in reverie, and in reclining posture, with eyes half closed and slightly parted lips, one hand resting on her bosom and the other holding in her lap a cluster of roses. "Love Awakening Memory" and "The Annunciation" by Mrs M. L. Macomber are contributions that rise far above the mediocrity inseparable from large exhibitions. There is also noticeable an absence of the labored artificiality characteristic of religious and emblematic themes as portrayed by modern artists. Here rather is the stamp of an earnest individualism, with all the grace and delicacy of a woman's touch. A religious motif, but of another kind, is displayed in Frank H. Tompkins's "Good Friday," which illustrates in the figure of a woman kissing the crucifix one of the rites of the Bavarian catholic church; but a work more generally preferred is his "Mother and Child," an ideal expression of motherhood. Among Ernest L. Major's canvases, his "Saint Genevieve" depicts in the character of a shepherdess the patron saint of Paris.

"Charity" is the masterpiece among Walter Gay's productions, which also include as religious themes, "A Gregorian Chant," "A Mass in Brittany," and "Dominican Monk." "Charity" represents a group of aged peasantry, and a little girl receiving alms in the form of a breakfast of dry bread. The features are full of expression, and the light and color in perfect taste, gray and black costumes contrasting with warmer tones. Charles Sprague Pearce's "Village Funeral in Picardy" is a truthful composition, depicting in faithful and well



THE COMMUNION. MELCHERS

studied types a number of provincial dames seated outside a house of mourning, their garments as subdued in color as is their assumed expression of grief,—decorous, but without trace of real emotion. By the same artist are "Mother and Child," "The Annunciation," "The Shepherdess," and a couple of portraits, all showing the precision of style for which he is noted. In common with others whose works finds a place in the United States galleries, Pearce is sojourning in foreign lands; for to the true artist there is no home save that of his art, and many of those whom I have mentioned as American painters no longer reside in the land of their nativity.

"The Communion," by Gari Melchers, is a painting of remarkable individuality and strength. Worship is its theme, pure and reverent worship, a simple and trusting faith unclouded by the faintest shadow of doubt. The story is forcibly told, with dignity of expression and absolute truth and directness of treatment. For this and other of his works the artist has gathered about all the honors that European schools and salons have to offer, and that these honors have been worthily bestowed there is here sufficient evidence. His "Sermon," for instance, is full of sentiment, but without trace of sentimentality, of beauty and power without undue striving after effect, and if there is also realism, it is an unconscious and not over-studied realism. The scene represents a number of Dutch peasants, most of them women, listening to a sermon in a village church, and that it is a lengthy sermon may be inferred from the fact that one of them has fallen asleep. There is nothing beautiful about these women, and there is nothing very remarkable, except that they are thoroughly Dutch and thoroughly devout women; but their faces are full of character and meaning portrayed with a master's touch. And so

with his "Pilots," where men are seated around a table in an upper chamber of an inn, whence is a view of red-tiled roofs and the blue sea beyond. They are merely talking and smoking, except for one who is at work on a model of a ship; but there is a wealth of character in these rugged features, in which one may see at a glance what manner of men they are.

In "Married" and "Skaters" by this artist are traces of the French school, but only as to coloring, in which he never goes to an extreme. A young Dutch peasant is walking proudly and with uplifted head, as though thankful for the blessing at his side, a young woman with downcast eyes, but none the less proud and thankful, as it seems, that her love has been requited. "Skaters" is a love scene amid ice and snow, but with a warm and cheerful home waiting to receive the maiden and her swain with genuine Dutch hospitality. In still another key is "The Nativity," where the subject is treated in original vein. In a stable lies the newborn infant, the mother resting her head on the father's shoulder. It is daybreak and soon the shepherds will be here, and the wise men and the kings; but there is no suggestion of the supernatural, not even a halo,



BREAKING HOME TIES. HOVENDEN

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though with a peculiar light around the child, while the rapt expression in Joseph's face suggests only the mystery that always possesses him who first becomes a parent. The story of the nativity is told, but told in a style very different to that of the older masters.

Among paintings that are the theme of general comment is Carl Marr's "Flagellants," exhibited in many a European salon before it found its way to Jackson park. The procession of the flagellants, it is said, dates back to the days of Saint Anthony, and in the thirteenth and fourteenth centuries spread throughout southern Europe, where the devout, with vigorous self scourging, weeping, and groaning, hoped to obtain the deliverance from war and pestilence which their prayers had failed to afford. Such is one of the scenes that Marr describes, with literary as well as pictorial fidelity to truth. The canvas is of mammoth size, and yet it is almost crowded with figures, most of them stripped to the waist, as they pass in procession a cathedral in northern Italy, where some turn aside and others go on their way in a frenzy of fanatical enthusiasm. Old men and children are here, and in the foreground a child is being carried in a litter, with maidens fair of aspect lustily applying the knotted lash to naked backs and shoulders. Notwithstanding its repulsive theme, one cannot but admire this composition for its drawing and coloring, and especially for the grouping of figures and faces, each of which, when viewed at a proper distance, is of itself a study.

"Breaking Home Ties," by Thomas Hovenden, is one of the few works of merit whose theme is descriptive of American life; for as I have said the United States galleries are crowded with depictions of foreign scenes



and incidents, to the exclusion of the rich and varied subjects which the artist might have selected almost without stepping from his door. It is a simple and touching story of New England life in days not long gone by. In the "living room" of an old-fashioned farm house, a mother with sad and anxious look is taking leave of her son, who bravely struggles to mask his home-sick longing and lingering. Near by are his sisters and his father, the latter carrying his carpet bag, and in the background his dog. The members of the family have just risen from the last meal which for a time they will take together, and the table is set with the quaintest

of china ware, the ingrain carpet and the straight high-backed chairs completing a picture which the New Englander knows so well and loves so well to see.

On two of C. Y. Turner's canvases are described the oft-told stories of John Alden's letter and the courtship of Miles Standish, both familiar to the public in reproductive etchings. In the former the puritan captain is standing in front of the fireplace, bethinking him how to indite his tale of love to the bashful scribe who is acting as his amanuensis. In the other John is pleading his rival's cause with downcast look. He is seated as far away from Priscilla as space will permit, and yet not far enough, it seems, for he is the very picture of embarrassment. The maiden is at her spinning wheel, over which her head is demurely bent, for she is not yet ready to utter the words which Longfellow puts into her mouth: "Why don't you speak for yourself, John?" The story is told exceeding well, and the entire composition, with all its accessories, is full of the atmosphere of New England life. Another of Turner's New England scenes is "The Days that Are No More," where a young widow is leading her little girl from the graveyard where her husband sleeps. She is moving slowly and reluctantly, trying in vain to stifle her sobs, as she goes forth alone with her child to take up the weary life that must still be lived, without the strong arm and loving heart that are laid forever at rest.

McEwen's "Witches" deals with a tragic incident in New England annals. The scene is at Salem, where, manacled in her prison cell, stands a beautiful girl confronting the executioners who are about to lead her to her doom. A withered hag is leaning toward her with uncanny



CIVILIZATION. G. W. MAYNARD

leer, for she also has been condemned, and takes comfort in the thought that this fair young life will be crushed out before her own. In the central figure is an expression of pain and surprise but not of terror, for she will meet her fate with dignified resignation, as the victim of superstition or perchance of jealousy, prompting some rival to bear false witness against her. Excellent is the light effect from a window in the background, encircling the maiden's head as with a martyr's halo. In "The Absent One" is a similar play of light in a Dutch interior, where on All Souls' day a young woman is reading to her father from holy writ the passages that tell of the life to come, upon which already his wife has entered. Other works by this artist are "Telling Ghost Stories" and "Judgment of Paris;" but rather would we have had more of his domestic themes.

"The Bathers," by Alexander Harrison, represents a number of women, in the water or on the sand, beckoning to each other and enjoying themselves to their hearts' content in nature's garb and in communion with nature. The coloring is excellent, especially that of the water, for in his rendition of moving waters and the play of light upon them Harrison has no superior. It is this quality also that has given to his "Crepuscle" a wide celebrity. Beautiful is the glow of the setting sun reflected from the tranquil waves, whose aspect



THE WINDOW SEAT

From painting in oil by P. D. Millet



suggests the majesty of ocean even in its restful mood. These gently curling billows and the foam that crests them seem to be permeated with light, an effect most difficult to produce, and which can only be accomplished by a master of his art. "En Arcadie," pronounced by an able critic one of the best works of the "plein air" school, is a picture of a forest glade peopled by fairies, whose forms are bathed in a soft

golden atmosphere of sunlight glancing through the trees. Here again the light and air are perfect; but as with his other compositions, the figures are somewhat lacking in grace and refinement.

"A Surprise," by Birge Harrison, has for its scene the forest of Compiègne in autumn tide, the ground covered with russet leaves, of which only a few remain on the branches above. A peasant girl is gathering wood, and glancing upward for a moment sees an antlered stag within a few rods of where she stands. They are looking at each other, and admirable is the expression of astonishment and fear in the face of each, for both girl and stag are thoroughly alarmed, and a moment later will be running from each other as fast



POMONA. MAYNARD

as their limbs will carry them. In "The Return of the Mayflower" a puritan maiden is gazing intently at the approaching vessel, on board of which is her lover. She is a comely damsel, though with features worn with sickness and suffering, love sickness it may be, for their expression is of tender, earnest longing, of impatience that can barely wait until the ship shall reach its haven.

Of the eight canvases from the brush of F. D. Millet his "Window Seat" is one of the best illustrations of his effective and scholarly style. It is a simple story simply told, with sufficient detail and a happy combination of quiet, restful colors. George W. Maynard, by whom is an excellent portrait of Millet, is also noted for harmony of coloring and strength of delineation, as is observed in his "Pomona" and "Civilization," the latter a dignified interpretation of its title. "A Card Trick," one of J. G. Brown's contributions, and "Soap Bubbles," by Elizabeth Gardner are also among the pictures that tell their own tale, the facial expression in both being admirably rendered. "A Dream," one of the smallest of Charles C. Curran's canvases, represents a number of fairy-like forms grouped around a soap bubble radiant with prismatic hues. In "Night Market, Morocco," by Thomas S. Clarke, the scene, except for its Moorish figures, might have been in any city where peddlers hawk their goods amid the flare of smoking torches. William Keith and Toby Rosenthal are among those who represent California art, the former with his "Autumn Sunset" and the latter with "A Dancing Lesson of our Grandmothers," a study full of life and action and with evidence of his well-known skill in drawing and coloring. But Pacific coast art was seen to better advantage in the state buildings, and is seen to still better advantage in the Midwinter Fair in San Francisco.



A CARD TRICK. BROWN

Of Tryon's thirteen landscapes all but two are loaned by their purchasers, and in each is the refinement and delicacy of touch characteristic of this popular artist. More pleasing than powerful, they are for the most



SOAP BUBBLES

From painting in oil by Elizabeth Gardner



part in minor key, with effects of early morn and evening light, of spring and autumn tide, of the rising moon and the setting sun. Similar in technique, though differing widely as to general results, are Murphy's "November Grays" and the "Hazy Morn." In contrast with these, and not for their merit, but as samples of the impressionist paintings of the purple and lilac school which disfigure the walls of these galleries, may be mentioned Twachtman's canvases, one of which is aptly styled a "Decorative Landscape," decorated that is with the all-pervading hues of purple and lilac, relieved here and there by a dash of vermillion or a streak of yellow and white. Not that I would pronounce a sweeping condemnation on all painters of this class, for Corot and Daubigny were impressionists, as are many of the most gifted of American artists; but they are not of the purple and lilac school. One may paint a scene, as at the moment it impresses him, without orange-colored grass or foliage, and without shrouding waters, hills, and plains in filaments of gauze. It is mainly this striving after atmospheric effect at the expense of form and texture that makes such depictions seem blurred and dim, their figures flat, and the entire composition a counterfeit resemblance of its subject. Such paintings may be well enough as artistic fantasies, but they are not as nature paints.

Twachtman's compositions are by no means the most pronounced of the ultra-impressionist school, and viewed at a proper distance his landscapes are not without their attractive features. More striking examples for



A DANCING LESSON OF OUR GRANDMOTHERS. ROSENTHAL

instance, will be found in Vonnoh's canvases, and especially in his "Duxbury Bay," with its gaudy, disintegrated coloring; in Dannat's bold looking "Spanish Women," and in Reid's "Vision of Saint Angela d' Agnant," where, though the figure is skilfully drawn, we cannot tell whether the crepuscular light which surrounds it is that of early morn or eve. To the same class belong, among others, Pearce's "Annunciation" and Du Mond's "Christ and the Fishermen," both painted in modern style. In contrast with these is Blashfield's, "Christmas Chimes," with its ideal and somewhat daring treatment, yet in perfect harmony with the subject.

To return to landscape scenes may here be mentioned those of John J. Enneking, who with Tarbell, Vinton, and Thomas Allen, all represented in the New England collection, was appointed to the Massachusetts jury of selection on paintings in oil. While in all of Enneking's canvases is fully justified his high repute as an artist true to nature, perhaps in his "October Twilight in New England" is the most striking expression of his power. Through a bare network of boughs is depicted with remarkable depth and warmth of coloring a golden sunset scene, with foreground of grayish rock, moss-covered and fringed with autumnal leaves. Other of Enneking's works are "Autumn Afternoon," "November," "Salting Sheep," and "South Duxbury Clam Digger." Of the canvases of Charles H. Davis "Abandoned" shows to excellent advantage his subdued and scholarly style. The scene is a deserted farm house, its crumbling walls and desolate environment in keeping with the sentiment of the theme. In all the paintings of this artist may be noticed a certain gravity of tone and expression, an absence of strong coloring or striking contrasts of light and shade. By those whom such

things please he has been accused of dullness and monotony of treatment; but one turns with a sense of relief from the sensationalism all too common in American art to the repose and refinement of these dignified compositions.

A powerful, if somewhat trist and melancholy scene, is Charles H. Woodbury's "North Sea Dunes," showing a wilderness of sand hills thrown up in unnumbered aions by the ceaseless action of wind and wave. Here is the very genius of desolation, the sketch being taken from the landward side, and with Liliputian figures of peasant women contrasting with the gigantesque proportions of the dunes. In other vein is Woodbury's "Tide River," with its breadth of treatment and richness of coloring. A pleasing combination of



CHRISTMAS CHIMES. BLASHFIELD

landscape and genre painting is Knight's "Hailing the Ferry," a loan from the Pennsylvania academy of fine arts. "Moonrise," by Thomas Allen, is a well conceived and executed composition, full of repose and tranquillity, one in which the stillness and intangible hues of twilight have been rendered by a master's hand. Of the four paintings by D. J. Elwell, "Moonlight at Domburg, Zeeland" was executed while a student at the Antwerp academy. Its weird and sombre tones, suggesting rather than portraying an almost invisible landscape, at once established his reputation among Belgian critics when displayed at the Cercle Artistique.

A prominent rank among marine painters is conceded to William G. Norton, among whose works the "Return of the Herring Fleet" is worthy of special note. The scene is on the coast of Holland, where a number of fishing smacks, roomy and broad of beam, are running under full sail toward the beach. Awaiting them is a group of figures essentially Dutch as to feature, figure, and costume. The picture is full of color, life, and motion, the sky filled with swirling clouds and the sea of the dingy cream color peculiar to the coast, changing to a light blue as the horizon is approached. "Rhode Island Coast" is a faithful and unpretentious study by W. Whittredge, by whom also are "The Plains" and "The Old Hunting Ground," both of them loan contributions. "The Seiners' Return" and "The Open Sea," by Walter L. Dean, are in the best vein of this well known artist, the former especially, with its depth of space and vitality of color, showing thorough familiarity with the details of his craft. A more ambitious work rep-

resents, under the somewhat inappropriate title of "Peace," the white squadron of our navy anchored in Boston harbor. Unless it be for a New Bedford whaler there is no more unsightly craft than a modern iron-clad, and worthy of all praise is the skill which has given to these frowning leviathans of war an element of the picturesque, grouped as they are in placid waters and under a summer sky. This picture, it may here be mentioned, is the largest of its class, nine feet in length by more than six in width. "Danger Ahead," by Albert H. Munsell, represents the bow of an ocean steamer running at full speed toward the on-looker, who to grasp the realism of the scene must imagine himself on board a vessel lying in her path and in imminent danger of collision. In contrast with this may be mentioned Jules L. Stewart's sketch, "On the Yacht *Namouna*."

Military subjects are but slightly represented. One of the smallest and best among them is "Driven Back," by De Cost Smith, whose time has been largely devoted to the study of Indian life. It represents a party of Sioux warriors emerging from a river by which they are separated from a pursuing squadron of cavalry.



"Charging a Battery" and "Silenced" are from the brush of Gilbert Gaul. "An Innocent Victim," portraying an episode in the Franco-Prussian campaign, is by Seymour Thomas, who appears to have gone far afield in search of inspiration, while neglecting the stirring incidents of the civil war. Among the engravings, etchings and drawings are also a few illustrations of soldier life.

Water colors are plentiful in the United States galleries, forming a copious but not a very comprehensive exhibition; for several of the leading masters, such men for instance as John Lafarge, are here without representation. Among the best of the landscapes and sketches are Minor's "Moonlight;" Mente's "Evening Pastoral;" Ochtman's "Frost;" Eaton's "Autumnal" and "Indian Summer;" Cabot's "Wind-Swept Beeches, Naushon Island;" Pierce's "New England Pasture;" Fidelia Bridges' "In an Old Orchard;" Hallett's "Winter Moonlight;" Hardwick's "Looking Inland;" Alice Stackpole's "Late Afternoon in Beverley," and Fanny W. Tewksbury's "New England Homestead." "Portal of Ruined Mission, San José, Texas," is by Thomas Allen, who in common with several others is also represented in the collection of oil paintings. Among other architectural themes are Blaney's "Temple of Neptune;" Rotch's "Linburg Cathedral," and Colman's "Mosque" and "Ruins of a Mosque," at Tlemcin, Algeria.

"A Sioux Camp," "Mountain Trail," and "Got Him," are by Henry F. Farny, the last illustrating a mode of dealing with the Indian question which should commend him to the notice of the government. F. Hopkinson Smith has four of his canvases, among which are "The Rialto" and "Venetian Fishing Boats." Edwards sends "An Interesting Subject" and "In the Dunes, Flanders," both of them somewhat broad in style. Abbey's "Mariana," a study from *Measure for Measure*, was recently exhibited at the New York academy of arts. Clara T. McChesney's "Still Life" and "The Old Cobbler" are suggestive of the Dutch school.



HAILING THE FERRY. KNIGHT

Of the three canvases by Rhoda Holmes Nicholls "The Scarlet Letter" is specially to be commended. Pleasing studies also are Church's "Pandora;" Hassam's "Fifth Avenue" and "Springtime in the City;" Guerin's early morning scene in a village street in Kentucky, and Smedley's contributions, several of them relating to the Exposition grounds and buildings. So also are Turner's "Flood Tide;" Richards' "An Atlantic Beach;" Silsbee's "Monadnock;" Ellen S. Dixey's "Dresden in January;" Rosina Sherwood's "September;" McIlhenny's "Old Friends;" and Kathleen H. Greatorex' "Carnival." While in these and other works the American school is fairly represented, it must be admitted that the galleries devoted to domestic art appear to better advantage in oil paintings than in the lighter medium of composition.

In etchings may first be mentioned the works of James McNeill Whistler, one of the most finished etchers since the days of Rembrandt, and one of the few who have achieved a world-wide repute in two important branches of art. In his etchings, as in his paintings, the merit is not only in what he puts into them but in what he leaves out, seizing on the central points of interest and giving them suitable emphasis, yet with a sufficiency of detail in subordination to the general effect. In proof of the esteem in which he is held, it may here be mentioned that of the works exhibited in this collection, not one is from his own studio, all of them coming as loans from many cities and from many owners; but as they are three-score in number, touching on a great variety of subjects, they cannot here be reviewed in detail. Stephen Parrish, Charles A. Platt, J. Alden Weir, Alexander Schilling, Charles A. Vanderhoof, Charles F. W. Mielatz, and Mary Nimmo Moran are also liberally represented among the more prominent etchers of original themes.

In engravings, and especially in wood engravings, a leading rank is conceded to American artists, the highest honors at the Paris Exposition of 1889 being conferred on a Massachusetts wood engraver, with minor awards to others of his craft. From this artist, whose name is Elbridge Kingsley, is a choice collection of prints, several of them reproducing the works of acknowledged masters. Portraiture, landscape, marine views,

historical subjects, and works in lighter vein are well represented in this department. Among the best of them is the portrait of Jean Baptiste Corot, by M. Lamont Brown, reproducing with singular fidelity and clearness of outline the well-known features of the great landscape painter. W. B. Closson has one of the largest and most valuable exhibits, several of his wood engravings produced by a method of his own invention, the nature of which is still a secret, but of which it may be said that the work is largely done by hand, and has no relation to photo-mechanical processes. All his specimens are of the highest class, representing such masters as Rembrandt, Murillo, Jean François Millet, Bonvin, George Fuller, and A. H. Thayer. William J. Dana has landscape studies after Corot and Appleton Brown. Of excellent workmanship are William P. Cleaves' engravings whose themes are mainly taken from White Mountain scenery. Prominent among the marine views is the "Ship in the Fog," by Harry E. Sylvester, whose prints are also illustrative of church and cathedral architecture.

As loans from a New York publishing company are a number of works by Timother Cole after Michael Angelo, Raphael, Paul Veronese, and other Italian masters. These are not only among the best engravings



RHODE ISLAND COAST. WHITTREDGE

in the art display but among the best of modern times. Frank French has studies after Martiny, Barye, Fortuny, and others, together with original compositions. Thomas Johnson is strong in portraiture and figures, as also are Henry Wolf and Gustav Kruell. John P. Davis, Francis S. King, H. F. W. Lyouns, and Caroline A. Powell are represented by a variety of themes. In a steel engraving by S. A. Schoff is a marine subject after De Haas, with a copy of Rowse's well known portrait of Emerson.

Of pastel drawings the collection is larger than in any of the foreign sections; but in the United States as elsewhere, except perhaps in France, this medium is seldom employed and rarely to good effect. Of the famous New York Pastel club only one of its prominent members is represented, and that one by a single contribution—"Good Friends," by William M. Chase. Appleton Brown has several landscapes; Jules L. Stewart, Jacob Wagner, Cecilia Beaux, and Anna E. Klumpke have each a portrait; Caroline F. Hecker, a couple of flower pieces; Adelaide Wadsworth, a Venetian scene; Birge Harrison, "Evening on the Seine;" Charles A. Corwin, "Oat Harvest;" and Julius Rolshoven and other skilful pastellists are represented by various subjects.

Of pen, charcoal, and other drawings there is a large collection of excellent quality, one to which the only exception that can be taken is to its size. C. D. Gibson, for instance has no less than six and thirty pen-drawings on exhibition, together with three wash-drawings. All of them are of unquestionable merit; but if this eminent artist had sent only a few of his best, I cannot but think he would have appeared to better advantage. By Abbey are fourteen Shakespearian illustrations. Pennell and Fenn's liberal contributions relate almost entirely to architecture. Pyle deals largely with landscapes; Blum, with Japanese, and Castaigne, with





ON THE YACHT "NAMOUNA." STEWART

Provençal scenes. Reinhart's charcoals are among the best of their class, especially his portrait of Charles Dudley Warner. Remington inclines to animal and military themes, and Smedley's drawings cover a wide range of subjects. The Boston school is represented by Woodbury, Small, and Attwood; but in this department as well as in engravings and etchings, some of the most prominent names are omitted from the list of New England contributors; nor are these branches here so much in favor as in New York and Philadelphia.

In architecture in connection with the fine arts, New England appears to excellent advantage, as might be expected from a country which contains among its citizens some of the

foremost members of the profession. In monumental and city architecture Boston has almost created a school of its own, though as yet its works may not be fully appreciated, for men have become so accustomed to faulty architecture that they cannot readily accept designs of a superior type. While not original, except for the originality which combines old forms with new compositions, the members of this school have discarded all obtrusive and fantastic elements, reproducing without servile imitation the classic features of earlier days, so far as they can be adapted to modern conditions. If we are to have in this country a renaissance of architecture, it is probable that Boston will be its birthplace, while the dawn of that renaissance may possibly have been forecast in the ephemeral city of the Fair.

The best display of architecture as a fine art is in the Exposition buildings themselves, two of which, apart from state structures are, as I have said, from the designs of Boston artificers. By the firm of Peabody and Stearns, to whom were intrusted the plans for Machinery hall, is exhibited a sketch of its southern portal, with office sketches, all in water colors. From Edmund M. Wheelwright, city architect of Boston, are several designs for public edifices, showing the purity and symmetry of proportion characteristic of his compositions. Of special



AN INNOCENT VICTIM. THOMAS



MOUNTAIN TRAIL. FARNY

interest are Longfellow, Alden, and Harlow's designs in photograph for the Carnegie library and music hall at Pittsburg, and the city hall at Cambridge. Church, school, and college architecture find expression in drawings from Walker and Kimball; Andrews, Jacques, and Rantoul; Cram, Wentworth, and Goodhue, and the water colors of Sturgis and Cabot, the first of these firms also showing its plans for the Omaha public library and telephone exchange. Of the three water colors shown by Julius A. Schweinfurth, one is a competitive design for the American Fine Arts society's building in New York. From Arthur W. Wheelwright is also a suggestion

for a school of fine arts in connection with a university. H. L. Warren has several handsome compositions, one for a conservatory of music as an appendage to a female seminary, and others for the orphan asylum at Troy, built from his plans. Nearly all the larger cities of the United States, and not a few of the smaller ones, find expression in these galleries, with plans in every style and for every conceivable purpose; but as they are nearly 300 in number I cannot here present them in review.

An interesting feature in the galleries of domestic art is the retrospective exhibit of American paintings, some of them dating far back into the eighteenth century, and consisting largely of portraiture, though covering a variety of themes. The oldest of all is a picture of Bishop Berkeley and his family, painted by John Smybert in 1729. This is the property of Yale university, and is said to be the first canvas from the brush of an American artist containing more than a single figure. Of George and Martha Washington there are portraits executed between 1790 and 1792, with one of Jonathan Warner in 1761, of David Garrick in 1772, of



MOONLIGHT ON GRAND BASIN

Counsellor Dunn in 1795, and of members of the Dana family depicted in the closing years of the century. There are landscapes painted as early as 1810; there is an Indian scene in northern Texas the date of which is 1833; and about this time began to appear more ambitious subjects, as Allston's "Paul and Silas in Prison" and his "Danae and the Shower of Gold." Thus the collection is continued until it touches on the sphere of contemporary art.

But the centre of interest in the entire art display is the loan collection of foreign works contributed by their owners throughout the United States. This is officially styled a collection of foreign masterpieces, and such in part it is; but among these masterpieces are many inferior pictures masquerading under that title and many others which, though first-class paintings by artists of acknowledged merit, cannot properly be classed as masterpieces. Rather should it be termed an exhibition of the control which French art has acquired over American collectors and connoisseurs; for of its 126 specimens about three-fourths are French, most of the remainder coming from Dutch and English studios. A serious defect in these chambers is the grouping; and this is the more to be regretted that here was supposed to be the finishing touch of the art display, the brightest jewel in the artistic crown of the Columbian Exposition. The arrangement shows neither scale, proportion, symmetry, nor even due attention to the first principles of classification, some of the largest and smallest paintings hanging side by side, and with little regard to quality or subject. Thus Corot's "Orpheus" was placed in close proximity to the most daring studies of the nude, and Daubigny's "Cooper's Shop" hung next to a portrait of Madame Modjeska by Carolus-Duran. Here and there, however, the combination is better,



as in one of the chambers where side by side are the smaller works of Millet and Meissonier, Daubigny, Corot, and Theodore Rousseau.

Of the twelve paintings by Corot, each is a masterpiece, and yet all are different, not only showing the versatility of the great landscape painter, but explaining his potent influence as a factor in the history of art. From 1827, when his first picture was hung in the salon exhibition, until the time of his death in 1875, his works were never absent from its walls, and however important were the works themselves, they were far more important as lessons in contemporary art, as developing antecedent tendencies and pointing the way to a more faithful rendition of nature's truths. By those who have misconceived his style it is alleged that he merely



THE MAN WITH THE HOE. J. F. MILLET

idealized nature, that in his softly intoned effects of foliage and light he suppressed many details which he did not or would not observe. Rather should it be said that he separated from its minor features the central idea which he intended to convey. As one of his biographers remarks: "What he wanted to repeat was not nature's statistics, but their sum total; not her minutiae, but the result she had wrought with them; not the elements with which she had built up a landscape, but the landscape itself, as his eye had embraced and his soul had felt it. 'Truth,' he declared, 'was the first thing in art and the second and the third.' But the whole truth cannot be told at once. You can-

not paint summer and winter in a single canvas. Not even two successive hours of a summer's day are exactly alike, and you cannot paint them both." Certain it is that no man worked harder at his task, with more earnest conscientious study, long unrequited even by the scantiest recompense. At thirty he lived on a pension of \$300 a year which his father allowed him; at fifty this pension was doubled and still formed his only income; at sixty he had not sold a single picture, except to his brother artists. "Alas," he cried, as the first of his patrons carried away his purchase from the studio, "my collection has been so long complete, and now it is broken."

"Orpheus," with its strong and yet delicate rendering, is one of the most idyllic of landscapes, and in the highest style of classic art. The god of the lyre is greeting the morn, whose soft roseate colors are painted on a crystal sky as only Corot could paint them, and with the sombre tones of the foreground in perfect contrast. Almost beneath the shade of a stately tree whose foliage is tremulous with light, stands the figure of the great musician, his touch giving emphasis to the harmony of the scene, so that nature herself appears to listen. It is impossible to imagine a more beautiful conception or one more delicately executed. Here is the poetry of art, nature's own poetry, interpreted and accented by the touch of a master who was himself in closest communion with nature.

"Evening" is in another mood, with radiant sunset sky, whose glow is even on the shadows of the trees beneath which, their figures bathed in the mellow light, maidens dance to the low soft music of foliage attuned by the zephyr's breath. A second picture bearing this title, together with his "Landscape," "The Path to the Village," and other canvases represent different styles and periods in the life-work of Corot. But a stronger contrast than any is in "The Flight from Sodom," a work in which there is a wide departure from his usual mode of treatment. The landscape is here a subordinate feature, the figures grouped in the foreground forming the objective point of the composition. Lot and his family are well delineated, with suggestion of rapid flight from the devoted city on which his wife is gazing with fatal indecision, hoping perhaps that its doom may not involve the destruction of her home. "Danse des Nymphes" is a beautiful combination of landscape and figure painting, second only to his "Danse des Amours," the former with graceful buoyant figures grouped around a classic

temple buried in the woods, representing an ideal world with its fair suggestions of infinite joy and peace. "Environs of Ville d'Avray" is a study from the neighborhood where most of his days were passed, and whose summer foliage amid the soft evening light he loved so well to paint. Here he lived alone with art and nature, for he never married, taking in place of wife, as he said, "a little fairy called Imagination, who came at his call and vanished when he did not need her."

With the name of Corot that of Charles François Daubigny will ever be associated, not only as intimate friends, but as leaders of the school which delivered art from the barren conventionalism of the pseudo-classic period, and carried it far into the domain of reality and truth. Their style had much in common, though in both was marked individuality, Corot having more of sentiment in his works, throwing into them his own poetic imagery, while Daubigny aimed rather at reproducing the impression of the moment in all its freshness of form and coloring. Both were preëminent as landscape and figure painters, and both were more than that, their range extending to many subjects, all of them treated with the strength and beauty of touch which rank them among the classic masters of the age.

"The Banks of the Oise at Auvers," in the loan collection, was exhibited at the salon in 1863, and is one of several themes portraying under various aspects the scenic beauties of this stately river, with its broad and fertile valley. "Boat on the River Oise," hung in the salon of 1851, was one of the works which made his fame. For his "Banks of the Oise," displayed in 1859 was awarded the legion of honor, and still another is "The Banks of the Oise near Bonneville," which graced the salon of 1866. It was in the former year that Daubigny, wearied of following the stream afoot, and sleeping at hotels to catch his sunrise effects, bethought him of building a studio-boat with cabin in the stern which served as workshop, bedroom, and kitchen. This he christened the *Botin*, and in his little craft voyaged at will along the Oise and Seine with their adjacent waters, where, free from care, he communed with nature, and produced those famous studies of river scenery and river life on which his fame so largely rests. The summer of 1876 he spent on the Normandy coast, and the result is seen in several of his later compositions, one of which is here exhibited under the title "Coast near Dieppe."

As with Corot, the contributions from the brush of Jean François Millet are histories of his art life, beginning back in the days when a Boston connoisseur accorded to the then struggling disciple of the Barbizon school the recognition which his own countrymen persistently withheld. The price that was paid for the two-score of pictures which the Bostonian purchased from Millet, including some of his greatest works, it is not given to us to know; but we may be sure it was not much, for at this time they were almost unsalable. Parisians would have none of them, even as a gift, until the story of their sale was noised abroad, and not until many years afterward did they fully appreciate one of the foremost genre and landscape painters of the age.

Among his eight canvases in the loan collection, "After the Bath" is almost diminutive in size but large and strong in art. It is a study of the nude, as were most of his earlier works, until, as is said, the reading of a bible which his grandmother gave him when he left her to try his fortunes in Paris, caused him to exchange these subjects for the portrayal of peasant life. This is to be regretted, for in the undraped figure as Millet painted it, and as few else could paint it, there is nothing at which the most prudish could take offence. But this we are more than repaid in his later works, for here is a breadth of treatment and expression which won the hearts even of Parisian connoisseurs.



SONG OF THE LARK. BRETON



Profound was the sensation created in the salons by his "Man with the Hoe." It is merely a peasant at his task in the field; but in this unpretentious theme is a wealth of suggestion. The man is of repulsive and almost brutish aspect, with uncouth, muscular frame and low, retreating brow, almost hidden beneath a shock of coarse, matted hair. He is panting for breath with open mouth and stooping form, as of a worn-out beast of burden, and in that face, bent over the hoe on which he leans for rest, there is no human expression, no trace of mind or soul. It is merely the face of an animal, and of a savage animal, goaded by toil and suffering. A more pleasing study, but a less powerful one, is "The Sheep-shearers" with a richness and warmth of coloring which is not always found in the canvases of Millet. "The Pig Killers" is one of the gems of the loan collection, as also is "Peasants Carrying a New-born Calf." Perfectly modelled are the figures of the cow

and the sturdy young peasants, with their play of limb and muscle, while as to coloring—here is another example of what Millet can do when the subject is in harmony with his mood.

Of the "Reconnaissance" and "View near Poissy," the latter a beautiful landscape with color scheme in light green tints, it need only here be said that they are by Meissonier. From Rousseau, who with Dupré, Diaz, Corot, and Huet, all but the last represented in this collection, began the good work which Daubigny took up, there are four of his landscape paintings, though none of them are quite at his best. Nevertheless in all of them, and especially in his "View on



THE SPY. DE NEUVILLE

the Seine" and "Landscape in Berry," there are evidences of the strong technique of the great master, whose pictures no one would have, for none could fathom, as he did, the depths of nature's mysteries. Diaz' subjects are "La Danse des Almées," "Turkish Women," and "The Descent of the Bohemians," while of Dupré's three canvases two are studies of the sea. In this connection though of a different school, may be mentioned Claude Monet's "Harbor of Havre," with its smiling waters and quaint, old-fashioned houses; his "Morning Fog," with its iridescent sea breaking on a dimly outlined cliff; his "Dawn on the Coast of the North Sea," with its pale crimson sunrise; and his "Snow Scene," with its bleak and desolate pathway. In all but the last the light is delicately intoned, giving to nature the soft, dreamy aspect in which she is seen at her best.

In his "Odalisque" and his portrait of Modjeska Carolus-Duran appears at a disadvantage as compared with his paintings in the French section. Rosa Bonheur is well represented in her "Pastoral" and "Sheep," especially in the latter, with its fleecy clouds, in a clear blue sky, and its play of sunlight and shadow. While not among her more ambitious canvases, they are by no means unworthy of her brush. Cazin has four of his studies, among which "The Expulsion from Paradise" is depicted with startling realism. "Tiger Quenching his Thirst" and "Turks Abducting a Girl" are in the well known style of Eugène Delacroix, whose works too often border on the extravagant and sometimes on the grotesque. In his "Christ at the Tomb" the tragic elements are portrayed for all they are worth. There are the stains of blood, the pallid hue of death, the unspeakable agony, and around all the awesome gloom of the sepulchre.

Of the three Raffaellis here exhibited, "Absinthe Drinkers" represents two wrecks of Parisian humanity in the shabbiest of apparel, unkempt, unwashed, unshaven, with hardly a trace of the human in their sodden and ghastly features. They are seated at a table against the bare white wall of a café, and at the side of either a slender glass, filled with a pale yellow liquid, tells the tale of wrecked and hopeless lives. L'Hermitté's "Washerwoman on the Banks of the Marne" is resplendent with sunlight hues; Lefebvre's "La Cigale" is in his most imaginative vein; "Nymphs Bathing," by Monticelli, is remarkable for its coloring, its strains resembling the lacquer paintings limned on old cabinet work. Jules Breton's "Song of the Lark" shows the face of a peasant girl raised in wonderment at the sweet music overhead. In his "Colza-gatherers" the laborers are hard at work over their task, all save one who gazes for a moment on the glories of a summer day. A work of exceptional power and character is "The Spy," by Alphonse-Marie de Neuville. Near a table where a group of German officers are taking their evening meal, a Frenchman, disguised as a hunter, is being searched for papers that will doom him to a shameful death.

In Manet's "Dead Trocador" are skilfully combined the elements of the picturesque and the repulsive in the old time Spanish bull-fight, the costumes portrayed in brilliant tones and the figures brought into strong relief without elaboration of detail and with strength and simplicity of treatment. The two marine sketches by this artist are in his happiest style. The "Dogs and Hare" is an excellent study by Gustav Courbet, as yet but little known in America, as also is Dagnan-Bouveret, from whom are "Brittany Peasant Girl" and "La Bernoise." Fromentin's "Falconer" and "Women of Sahara" are here, and among Troyon's canvases are two of his choicest animal paintings. Degas' "Race-horses" and "The Dancing Lesson" are of little value except as specimens of the impressionist school from a man who seldom completes a picture, and yet is hailed by his brethren as one of the most talented and original artists of the day. The latter represents a number of ballet girls with circling arms pirouetting on satin-covered toes, among them a portly bald-headed ballet master, and seated in the foreground, reading a newspaper, a coarse looking woman attired in blue-spotted cotton gown. There is no attempt at theatrical display; simply a group of bare-legged lasses practising on a bare floor the art which brings them a livelihood.

Sisley's "Village Street, Moret" is a neatly executed composition, with pleasing color scheme, especially in its pink roofs contrasting against violet-tinted clouds. A picture by Helleu shows a beautiful light effect in the interior of St Denis cathedral, with a recess full of dim purple shadows, in the depths of which a stained



READING FROM HOMER. ALMA-TADEMA

glass window sheds on wall and effiged tomb tints of variegated hue. Worthy of note also are Gericault's "Study of a Cuirassier," Greuze's "Pouting Child," Bastien-Lepage's "Reverie" and "The Thames," Detaille's "Flag of Truce," Ribot's "Young Politician," Michel's "Plain of Montmartre" and "The Horseman," Decamps' "Oriental Kiosk," and Fantin-Latour's "Vision of Tannhäuser."

England is represented in the loan collection by Watts' portrait of Joachim, the greatest of modern violinists; Alma Tadema's "A Reading from Homer," three of Constable's studies; a landscape by Barrington; Morland's "Contentment," and three of Swan's famous animal paintings. From Germany are canvases by Ludwig Knaus and Fritz von Uhde. From Holland the most noticeable works are "The Flock," by Antonin Mauve, and "A Frugal Meal," by Josef Israels, whose "Alone in the World" is one of the most graphic studies in the Dutch section and in the entire art display. Jacob Maris in his "Canal in Holland" has expressed about all that can be got out of this favorite theme among Dutch artists; but such paintings are not all like this; only by the brush of a Maris and other masters of his school could so much expression be thrown into a commonplace subject. From Belgium there are "The Book Stall," by Hendrick Leys, and "You are Welcome," by Jan Van Beers; while from Sweden comes a single painting by Anders L. Zorn, showing the interior of a Stockholm brewery.

In Italian art there is Michetti's "Springtime and Love," the spring and love, that is, of Italy's sunny clime. The scene is by the sea-shore, with grass-covered cliff, verdure reaching almost to the water's edge, the figures, though a little singular in delineation, standing forth in perfect harmony with nature's kindly mood. "Beach at Portici," by the Spanish artist Fortuny, is a masterly rendition of sky and sea, with fleecy sunlit clouds flitting across a light blue atmosphere, and on a foreground of glistening sand, figures in gay attire blending with the brilliant hues of flowers and foliage. Finally, there are a few pieces of statuary by the Parisian sculptors, Jean Léon Gérôme and Auguste Rodin, the former represented by his tinted marble group of "Pygmalion and Galatea" and the latter by his "Andromeda" and two marble groups of "Francesca and Paolo,"—"L'Amour" and "La Rupture,"—all executed under commission for the Museum of decorative arts.



Among foreign participants the largest space was allotted to the French exhibits, which, except for one of the American loan contributions, occupy the entire eastern annex. While, as I have said, the works of some of the great masters are not here represented, the display is a fair representation of the productions of the various schools, though from it more than a thousand eligible works were excluded merely through want of space. To the lighting of the chambers and the grouping of the pictures and statuary, under the direction of Roger-Ballu and his chief assistant, the former one of the art commissioners and inspector-general of fine arts, no exception can be taken. To give to the entire exhibition and to each of the exhibiting schools an appropriate expression, no pains were spared to insure the artistic grouping of the collections, the galleries being closely veiled until the last painting was in the appointed place.

A feature in this section is the cosmopolitan character of the display; for here are presented not only the works of all the French schools, but many in which there are unmistakable traces of foreign methods of



GENERAL VIEW IN FRENCH SECTION

treatment. Almost side by side with the finest landscape paintings of old-school masters are the broadest expressions of modern sensationalism and impressionism. Studies from the nude are plentiful, and as in all French exhibitions, among the best of the works. In most of them, however, there is no suggestion of indecency; for as Thackeray remarks, the draped figure is often more unchaste than that which is depicted as nature made it. Portraiture is well represented, and with many new names on the list of contributors in this as in other departments; for apart from loan collections, the French exhibits, whether of oil paintings, water colors, or drawings, of pastels, engravings, etchings, or architectural compositions, are restricted almost entirely to modern schools.

By Frenchmen and by those who for many years have attended the salons of France, it is conceded that never before, not only in the United States but in the salons themselves, was so varied a representation of French contemporary art. But while one of the most exhaustive collections, it is by no means the best that France could have furnished, and for reasons already stated, falls somewhat short of expectation. Especially is noticed in many of the paintings a certain monotony of coloring, in light and florid tints, without warmth or richness of hue. Though at first the effect is not displeasing, it is impaired by sameness and repetition, just as in the Russian section we turn with a sense of disappointment from the exaggerated and sometimes gaudy strains that mar the style of its depictions. Then there is observed an effeminacy of treatment, a lack of



ARCHITECTURE AND HISTORIC SCULPTURE, EAST COURT

originality in motif and of vigor in execution, giving to some of the compositions the stamp of hopeless mediocrity.

But to the majority of French paintings these remarks do not apply, while in sculpture none of the groups will compare with those which France has contributed. Though, as I have said, her display of statuary has been surpassed at former expositions, several of the great masters find expression, and among nearly 150 works, their subjects

ranging from cock-fighting to classic and historic symbolism, there are many of unquestionable merit. In addition to these is a collection of architectural and other casts from the museums of Comparative Sculpture, of Decorative Arts, and of the Louvre, better known as the Trocadero collection, from the name of the palace in which most of the originals are contained. This is of special interest

as the most valuable pieces have been presented to the Exposition authorities, and will form the nucleus of an art collection. Here may be traced through several centuries the development of French architecture, and especially of church and cathedral architecture, including the Romanesque, the Gothic, the renaissance, and the designs of more modern schools.

First among the groups is the sculptured portal of the church of Notre Dame du Port at Clermont-Ferrand, an eleventh century composition, the angular rigidity of the figures of Isaiah and John the Baptist on either side of the entrance revealing traces of Byzantine influence. Of the monastery of Charlieu is reproduced a portion of its façade, with diminutive windows, and large double door-way, the lintel surmounted with decapitated images of Christ and his apostles, the mutilation noticeable in these and other figures being probably the work of iconoclasts during the revolutionary era. On the tympanum is a seated form of Christ, with hand uplifted in blessing, and above it a richly ornamented arch. A façade of the church of Saint Gilles is also in part reproduced, its frieze representing in relief scenes from the passion; on the lintel and in the embrasures of the portal are other scriptural scenes. In each of the embrasures are figures of the disciples, their feet resting on lions in the act of devouring man or beast, and elsewhere in the decorative scheme are hunting scenes. The profane, it may here be observed, enters largely into the ecclesiastical architecture of the middle ages, with beasts portrayed in arabesque, saints and angels intermingling with heroes and demigods, while from Pompeiiian ruins have been unearthed the winged seraphim characteristic of Christian monuments.

In the casts above described are represented eleventh and twelfth century architecture. To the thirteenth century belongs the cathedral of Notre Dame de Paris, from which are portions of its



CHURCH ARCHITECTURE OF FRANCE



western door-way, with figures of prophets and kings on either side of the virgin, whose entombment and coronation are also symbolized, angels holding the winding sheet and in the back ground Christ and his apostles. From the cathedral of Bordeaux there is a large reproduction of the portal of its northern transept, where is a figure of Bertrand, archbishop of the diocese, afterward Pope Clement V. The arch is adorned with delicately executed forms of angels, apostles, prophets, and patriarchs, and in bas-reliefs superimposed are portrayed on the tympanum the last supper, the ascension, and Christ triumphant. By an unknown artist is a delicate piece



PORTION OF FRENCH SECTION

of workmanship whose theme is a stone gallery in the cathedral of Limoges. In the decorative scheme are winged heads of angels, headless figures emblematic of the cardinal and other virtues, with monstrous beasts and images sacred and profane, all in the choicest symbolism of the renaissance period. Elsewhere are represented the cathedrals of Amiens, Laon, Reims, Rouen, Lyons, Sens, Aix, Chartres, Bourges, Nantes, and Beauvais, with chapel, cloister, and chateau architecture from the eleventh to the nineteenth century.

Tombs are a feature in this collection, representing among other sepulchres that of the children of Charles VIII, fashioned in 1506, the figures of the princes lying on the top, with angels at either end, and in relief the exploits of Hercules and Samson. Here also is shown the sarcophagus of Francis II and his wife Marguerite de Foix, contained in the cathedral of Nantes, and executed, it is said, in 1507. But a more remarkable work than either is from the tomb of the seneschal, Louis de Brézé, the husband of Diana of Poitiers, erected in 1540 in the cathedral of Rouen. In the original the body rests on a slab of black marble; at its head is the form of his wife and at its feet the virgin and child, all the figures being flanked by pairs of Corinthian columns supporting an ornamented entablature, above which is an equestrian statue of the seneschal in full armor, the entire composition forming a choice illustration of renaissance art.

In contrast with these sombre themes are figures of the graces by Germain Pilon, resting back to back and with joined hands on a triangular base. A cast of a nude statue of Diana by Houdon, with remarkable symmetry of outline, represents the goddess poised on her left foot, and with orthodox bow and arrows. "Voltaire" by the same artist, the bronze original of which is in the foyer of the Comedie-Française, is a composition full of power and character. There are also casts of fourteenth and fifteenth century statues of Guillaume de Chanac and Philippe de Morvillier, with one of King Philippe VI, all from the Louvre at Paris. Animal sculpture finds a place in the collection, especially in the works of Barye, and there are nymphs and nereids, tritons and other fabulous creatures, for the most part of somewhat inferior execution.

Passing to contemporary art, may first be mentioned the statuettes of Meissonier, several of whose less known works are reproduced in bronze or casts in cire perdue. Among them is the figure of Marshal Duroc from Castiglione's painting of the "Campaign of Italy, 1796." On this he was at work when overtaken by the illness which ended his career. A spirited group by the same artist is the "Héraut de Murice," a trumpeter of the time of Louis XIII, the attitude of his steed showing the tension of extreme excitement. Others are his "Wounded Horse, Siege of Paris," "Dancing Muse," and "Design for a Fire-place," the last intended for his own atelier, its shelf supported by renaissance figures. In the "Four Figures from the Tomb of Lamorcière" to which Paul Dubois gave several years of earnest work, is a rare combination of the natural and the ideal. Faith is personified in the form of a young woman of virginal purity; charity in a woman with infants in her arms; meditation in a man with bowed head, with downcast features of strong, intellectual mold, and military courage in a youth clad in complete armor, over whose shoulders is a lion's skin.

A reproduction of "David the Victor," by Antonin Mercié, a pupil of Dubois, though dissimilar in pose, is suggestive of Donatello's famous statue; but here we have rather a promise than an expression of his more finished style, for this was one of his earliest works. In better vein is his "Quand Même," the original of which was executed for a monument at Belfort. Its theme is Alsace, symbolized by a young woman grasping the rifle of a wounded French soldier, who clutches the hem of her garment as he falls. "The First Funeral,"

by Barrias, is one of the masterpieces of French sculpture, even its mutilated condition detracting but little from the force and dignity of this well conceived and powerful composition. Adam is carrying to its resting place the lifeless body of his son; Eve stooping to kiss the brow, and in both a subdued but tense expression of grief, too strong for words or tears. "Mozart as a Child," in the act of tuning his violin, is a beautiful figure, its costume, pose, and suggested motion full of life and truth. Chapu's "Jeanne d'Arc" in kneeling attitude is in the best style of this well-known artist, whose themes are mainly from the antique. Falguière's "Republican France" is a symbolic statue, ordered for the occasion by the French government. In his figures of Diana is a better illustration of his skill and delicacy of technique. Of the colossal group in bronze, whose theme is Washington and Lafayette, it need only be said that it is one of Bartholdi's works. A modest and unpretentious work by Raoul Larche is "Jesus Before the Rabbis," representing its subject looking upward at the doctors as though questioned or bethinking him how to answer a question. His attire is of the plainest, consisting only of a single garment, and in the features and figure there is no suggestion of the divine, except for the divinity which belongs to childhood.



AMONG THE STATUARY OF FRANCE

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A strong and impressive work is Saint-Marceaux' "Spirit Guarding the Secret of the Tomb," for which was awarded the medal of honor at the Paris salon in 1879. In the features and figure of the genius, his face turned backward as though resenting intrusion, while grasping in his arms a funeral urn, is a wonderful depth of expression. Rodin's "Burgess of Calais" recalls the familiar story of the siege of that city in the days of Edward III, with the figure of one of its heroic defenders, on which is the impress of stern resolution, portrayed in almost Gothic simplicity of outline. Boucher's "On the Ground" is one of the best examples of the naked figure used as a medium of expression. Toil is the theme which is symbolized in the person of a man digging around a stone with his shovel, and had the form been draped, the effect would be merely that of a common laborer at his daily task. Of nude woman, Idrac's "Salamambo" is a well executed type, though expressive of nothing in particular. In Marquestre's "La Cigale" is portrayed with startling realism the sensation of cold. By Delaplanche "Security" is symbolized in true academic vein by the figure of a woman clad in armor, with sword in hand, and in her lap a sleeping infant. In Lanson's "The Age of Iron" is expressed by a warrior and his vanquished foe, the spirit of the age when might was right. "The Blind Man and the Paralytic" is the subject chosen by Jean Turcan and Gustave Michel, the latter of whom has two other statues on exposition.



In animal sculpture Emanuel Frémiet stands almost alone in his profession, though his choicest works, as the equestrian statue of Jeanne d' Arc in the Place des Pyramides at Paris, are not reproduced in the French collection. His wounded dog, while a faithful delineation, is one of his minor works. In his "Man of the Stone Age" is symbolized the prehistoric era of the human race, the figure clad in the skins of wild beasts and grasping a huge hammer with head of stone, standing forth with tense rigidity of outline, and yet in the features is a certain aspect of intelligence and even of dignity. The life-sized groups by Auguste Cain are accurate representations, but lacking in vigor of expression, and would be more in place in a zoölogical museum than in a gallery of fine arts. One of them represents a rhinoceros goring a tiger, while a second tiger springs at his shoulder. The others are entitled "Eagle and Vulture Quarrelling over a Dead Bear" and "Lion Strangling a Crocodile," the latter a feeble composition as compared with a similar theme by Barye in the Trocadero collection.

Turning to the picture galleries, with nearly 500 oil paintings and a large number of water-colors, drawings, etchings, and engravings, we find here almost every conceivable subject that has occupied the brush of the painter. While a large proportion are in lighter vein, with something too much of the frivolous and altogether too much of the nude, graver themes are well represented. Of portraits, landscapes, mythologic, military, and historic scenes there is a large collection, some by acknowledged masters and others of unquestionable merit,

while even religious subjects are treated with all the pathos and seriousness of which the Frenchman's mercurial temperament is capable.

In portraiture and figure painting may first be mentioned the three works of Carolus Duran, one of which excited much comment at the salon of the Champs de Mars in 1892. It represents in truthful rather than complimentary vein a wealthy middle-aged American woman, seated in state against a background of yellow plush curtains, attired in satin and velvet and bedecked with jewels, her feet resting on a



FRENCH AND BRITISH SECTIONS, SOUTH COURT

silken cushion, and her face and hair suggestive of powder and rouge. Another portrait is that of a young girl; and a third shows a pleasing figure in gray, both in the happiest style of this master of his special art. Bounat's "Cardinal Lavigerie" has more of the Turkish than the episcopal aspect, the red sash and black soutaine beneath his scarlet robe giving to this African primate almost the appearance of a pasha, which is further enhanced by his fez and his swarthy complexion. "Renan," by the same artist, shows a heavy thick-set figure and sensuous face peering forth from their enveloping shadow. Chartran's portrait of Leo XIII is an excellent work; but not, as has been claimed, the only one taken from life.

Raffaelli's three canvases do not fairly express the power of this eminent master, who appears to much better advantage in the loan collection. "The Grandfather" is over bulky in form, as also is the child by his side. "In the Plain" does little credit to his brush, and his depiction of Brittany peasants is somewhat hard in tone. Of Henner's "Portrait of My Brother," "Lola," and "Slumber," the two last are female heads reproduced in his dreamy, languorous style. Rondel's "James Gordon Bennett" is one of the gems of the collection, as also is Gustave Courtois' "Madame Gautreau," both of them life-like and vigorous conceptions. One of Wencker's paintings is said to reproduce the refined and sensitive features of Madame Giroa; another is of Boulanger; but a work more admired than either is his large painting of the Basilica, with its rich Byzantine theme. "Portrait of M. G. A. E." is the only canvas from Eugène Antoine Guillon, one of the most celebrated painters of historic portraits, among which are "Napoleon's Adieu to France," "Napoleon at St Helena," and "John Brown and His Accomplices on Trial." Alfred Guillon, though a sculptor by profession, is also represented by a single picture, the subject of which is "My Little Brother." Another master of historic portraiture is Jean Paul Laurens, who has long stood at the head of his profession, and has exhausted all the honors which his country had to offer. His themes are "Christopher Columbus" and "The Seven Troubadours." Layraud's portrait of Liszt represents the great composer standing by the side of his instrument. "Young Girl



of Tougourth, Algiers" is by Charles Landelle, a most prolific painter, not only on canvas but on everything else upon which paint can be laid.

A pleasing composition is the "Rêverie" by Jules Emile Saintin, a medallist of 1866 and with remarkable facility of adaptation, his themes extending from the soubrettes of the Comédie Française to the dignitaries of the church. The "Portrait of Professor Charcot" is by Saintin the younger, who appears to better advantage in marine and landscape scenes. Henri Gervé's three canvases, are in the familiar style of this well known portrait and genre painter, among whose more famous works are "Diana and Endymion" and "Communion at the Church of the Trinity." In the compositions of Jean François Gigoux there is much to remind us of this veteran artist whose "Jean d'Arc," "Charlotte Corday," and "Death of Cleopatra" are among the masterpieces of the age. So also with Jean Joseph Wceerts and Louis Picard, the former represented in the salons since 1867 and the latter for nearly half a century. "The Old Peasant" and "Dreaming," are by Edouard Sain, from whose facile brush are many truthful scenes of every-day life. "The Death of Archimedes" is from Edouard Vimont, whose figure paintings range from pagan myth to Christian martyrdom.

One of the strongest subjects, though something more than a portrait, is "Marat, Friend of the People," representing this incarnation of the reign of terror seated at a table while writing his despatches, his coarse animal features and fell shock of unkempt hair giving to him almost the appearance of a beast of prey, so that we could wish his career had sooner been ended by the knife of Charlotte Corday. The work is by Daniel Léon Saubes. Adolphe Yvon's "Carnot" is a full length portrait of the president of the French republic in

cabinet session. "Japan" is a decorative fantasy by Louise Ab-bema, showing a woman in Japanese attire amid a group of porcelains and embroideries, around which is a border of chrysanthemums. While a pleasing subject, it is somewhat commonplace as compared with other works of this famous artist. "The Falling of the Leaves" represents, amid an autumn landscape, the figure of a pretty woman such as none know better how to paint than Madeleine Lemaire. A fine conception also is her "Chariot of the Fairies," hung in the southern gallery. "The King of the Forest" and "The Overthrow" from the brush of Rosa Bonheur, and "Diana" by Helen Leroy D'Etiolles are among the best of women's works, the latter a beautiful composition, though with features suggestive rather of a court beauty than of the stately Artemis. Of the three canvases from Virginie Demont Breton, one has for its subject the training of a young sailor taking his first surf bath as he clings to the arms of his mother. "Young Girl," by Fanny Fleury, has all the delicacy of treatment characteristic of this painter, the only one of a family of artists represented in the French galleries.

"Repose" and "The Friend of the Lowly," by L'Hermitte, are in the best vein of this well known artist, whose style is suggestive of Jean François Millet, represented, as are other great masters, only in the loan collection in the United States galleries. In the latter the form of a little child appearing



THE KING OF THE FOREST. BONHEUR





DEUX AMIES. MONTZAIGLE

amid a group of peasantry is the strongest feature in this thoughtful composition. "Young Girls" and "Women on the Grass" are from the brush of Alfred Philippe Roll, a pupil of Bonnat, but with strong individuality of style. In Montzaigle's "Deux Amies" two young women tastefully attired are chatting and sipping their favorite beverage at a café. The faces are not displeasing, and the pose and drapery show the touch of a finished artist. "In the Sunshine" and "Spring" are the works of Albert Fourié, whose vein inclines rather to decorative and genre paintings. "Still Life," by Amand Gautier, is the only contribution from this family of painters. Amand, it may here be said, is one of the few artists who have made lithography almost akin to the fine arts. Munier's "Cupids Resting" is a spirited interpretation of the subject, one of the figures with wings outstretched, and in his face the mischievous expression characteristic of the god of love. "The Cold Bath" is one of the later works of this celebrated painter, whose canvases have found a place at the salon exhibitions for nearly a quarter of a century. A similar theme is Delobbe's "Breakfast After the Bath," in which a child is offering a handful of fruit to a young woman in seated posture.

"In Sicily" is a typical theme by Aman-Jean, descriptive of peasant life, of sunny skies and landscapes. "The Last Load of Wheat" is by Jules Jacques Veyrassat, an artist known in the salons since 1848, and with won-

derful versatility of theme. In "Japanese Chrysanthemums" Jean Benner displays his well known skill as an executant of flowers and fruits. "Solitude" is from the same artist; and "The Alarm" comes from the versatile brush of his twin brother, Emmanuel. "My Birds" and "Decorated Panel, Flowering Laurels" are also from an artist famed for his delicate rendering of flower and fruit subjects, for accuracy of conception and harmony of coloring. His name is Ernest Quost. "Drowsiness" is the subject chosen by Etienne Tournès, whose portraits and figure paintings have long been familiar to frequenters of the salons. "A Singing Lesson in a Public School in Paris" is a pleasing sketch by Auguste Truphème. "Intemperance" is strongly treated by Duverger, whose figure paintings are suggestive of character and incident. "Don Juan in Hell" is a fair specimen of André Rixen's method of treating idealistic and mythological subjects. In similar vein is "The Dead Conversing in the Other World," by Charles Ronot, whose earlier themes were scriptural subjects. Among his later works is "Napoleon in Egypt," the original of which is the property of the state department. "Satyr at Bay" is by Louis Priou, whose "Family of Satyrs" was strongly commended at the Paris Exposition of 1878.

One of the largest paintings in the French section, and among the best of its kind, is "The Blind Man and the Paralytic," by Auguste Barthelemy Glaize. With staff in hand, striding vigorously over a rough country road, a man with sightless orbs is bearing on his back one stricken and wasted by paralysis, whose piercing and lustrous gaze gives stronger accentuation to the theme. Of Jules Breton's canvases, one of the best represents a group of women on their way to a procession. It is a fine illustration of the sculpturesque mode of treatment which won his fame and has found so many imitators. "Returning from Circumcision," and two other works, are the contributions of Felix Joseph Barrias, the father of Barrias the sculptor, and better known as a decorative artist. Among subjects



CUPIDS RESTING. MUNIER



IN SICILY. AMAN-JEAN

addressed to American sensibilities are Fournier's "Washington and His Mother" and Benjamin Constant's "Triumph of Christopher Columbus," the former a work full of tender expression.

In nude art one of the most dainty productions is Albert Maignan's "The Birth of the Pearl," representing a female figure reclining in a shell, with arm resting on the head of a boyish figure descending from above. By the same artist are "William the Conqueror" and "The Siren's Couch," the latter far down in ocean's depths, amid a bower of sea-weed and coral. Of Rosset-Granger's three works, his "Young Girl Chasing But-

terflies" is a pleasing subject. In "The Stray," showing the undraped figure of a woman cast on the beach by the tide, the drawing is excellent, but the purple tints of coloring are untrue to nature. "Cupid and Psyche" are treated by Thirion in somewhat vaporous hues. Rochegrosse, whose canvases too often incline to coarseness, has two of his chaster works. In "La Toilette," by Mousset, "Myrrha," by Loewe-Marchand, and "La Fourme," by Dubufe fils, the subjects are apparently chosen merely for the purpose of introducing the undraped figure; and why "La Fourme" should be so scantily clad amid wintry snows does not appear to the observer. In better taste is Raphael Collin's "On the Sea Coast," the subject of which is a group of young women dancing



YOUNG GIRLS GOING TO THE PROCESSION. BRETON





THE BIRTH OF THE PEARL, MAIGNAN

on the sands, one of them with slight drapery of lilac hue. It is a sprightly composition, with all the finish characteristic of the Ecole des Beaux Arts, and less indelicate than Aublet's "Women on the Seashore," whose scant attire displays rather than conceals the form. "Youth," by the former artist, is a voluptuous theme, and though strongly drawn is somewhat too broadly pronounced.

"Sea Birds and Wave," by Delacroix, shows a young woman exceeding plump of form, who, whatever she is supposed to represent, cannot be mistaken for a sea-nymph. "Une Restoration," by Edouard Dantan, tells its own story with sufficient clearness. Saint Pierre's "Saadia," displays the full-length figure of a *houre* reclining on a tiger skin placed over a divan of Turkish rugs, her face in striking contrast with the head of the brute on which it rests. There is no soul in these soft, dreamy features, and there is little intelligence; simply the expression of a beautiful animal, seemingly without vice or virtue, and as void of conscience as a mermaid. "Soudja-Sari," by the same artist, is also an oriental woman, with an expression of tender melancholy in her mournful, brooding gaze. A face with wondrous subtlety of charm is portrayed in Jules Machard's "Ready for the Garden Party," the figure standing erect attired in white, with lips slightly parted and laughter lighted eyes, the very incarnation of joyous womanhood, radiant with innocence and beauty.

Animal paintings and sporting themes are somewhat rare in the French galleries, and for the most part of no special merit. Besnard's "Two Ponies Harassed by Flies" are standing in a



YOUTH, RAPHAEL COLLIN



FOR THE SEA LOVER

Photomontage by J. H. H. H. H.



purple light which must be at least as unwelcome as their insect pests. "Wild Boar Hunt," by Jules Bertrand Gelibert is well worthy of this celebrated artist, whose works in similar vein have won for him more than a national reputation. It is to be regretted that there is no forest landscape from his brush, for none can interpret more truthfully the language of the woods. "My Start in Hunting" is by Gabriel Thurner, who is better known for his graphic depiction of fruits and flowers. "Boar on a Farm" is a fair specimen of Leon Charles Hermann's skill in animal painting. A Spanish bull fight is depicted in Möröt's "El Bravo Toro" with all the vigor and vitality for which this artist is noted, portraying with startling realism the fury of the tortured brute

and the frenzied excitement of spectators almost as brutish.

In landscapes and kindred subjects the works of several of the great masters are represented in the loan collection in the United States galleries, and are noticed in that connection. Among those contained in the French section, "Under the Walnut Trees at Vezelay in Spring" is a restful theme, by Adolphe Guillon, one of the acknowledged masters of his art: "Morning Fog" is by Adolphe Appian, a pupil of Corot and Daubigny, a truthful but not a brilliant artist. "Cape Breton Heath" is a contribution from Louise Augustin Anguin, also a disciple of Corot, and especially facile in arboreal paintings. "The Banks of the Seine at Vertheuil" is a pleasing theme by Emile Foubert, better known for his paintings of nymphs, fauns, satyrs, and other mythological subjects. "A Foggy Morning" and "High Noon in Provence" are the canvases of Julien Gagliardini, whose paintings cover a wide range of art, from fishing scenes to ecclesiastical architecture. Prosper Galerne's "Valley of the Loire at Chateaudun" is the work of an artist noted for his studies on the banks of the Seine. "Landscape" is by the late Charles Gosselin, whose paintings were hung in the salons for many consecutive years.

Paul J. M. Sain's "The Chalky Road near Avignon," though it cannot be termed a landscape, bears the touch of this well known painter of river and woodland scenery. "Plain of Moret" near Fontainebleau is by Leon Richet, noted for his studies in Normandy and Picardy. "In the Basque Country," and "Winter Pastures" show the sober but vigorous treatment which Félix de Vuillefroy brings to bear on all his paintings, whether of landscape, genre, or human and animal figures. In "Black Mountain," "A June Morning," and "An October Evening," Auguste Em-



SEA BIRDS AND WAVE DELACROIX

manuel Pointelin displays his well known skill in atmospheric effects. "Road of Vaudancourt," is by Aymar Pezant, whose forte is in winter and moonlight scenes. "Twilight and October Moon on the Banks of the Seine" is from the brush of Adrien Jourdeuil, better known as a decorative artist. Marie-Joseph Iwill's "November Evening" fairly expresses the power of this artist, whose forte is in winter landscapes. Julien Dupré's "Valley of the Durdent" is the only canvas from this family of artists, except for those contained in the loan collection. Adrien Louis Demont has for one of his subjects "Winter in Flanders," but a better work is "Jeunesse," a garden scene, where a young girl is seated on a rustic bench with pigeons cooing at her feet. From his wife Virginie Demont-Breton are also pleasing contributions.

In a harbor scene by Francois Nardi is portrayed with remarkable vitality of treatment the effect of "Mistral Winds Blowing on the Sea." "The Cancale Regatta" is by Eugene Feyen, whose brush has swept

the entire realm of art. Among his most famous works is "Gleaners of the Sea" in the Luxembourg collection. In Jean-Baptiste Olive's "The Isle of Maire near Versailles" are shown in striking contrast the bare yellow shore and the deep blue of ocean. In this locality is the scene of Morlon's "The Struggle for Life," representing a life-boat and its crew in imminent danger, with the waves dashing against a sheer wall of cliff. Another life-boat theme is by Eugène Berthelon, noted for his landscape studies in the neighborhood of Paris. A turbulent sea breaking on the rocky coast of Quiberon is forcibly depicted by Elodie La Villette. "At Low Tide," by Gustave Ravenne, is the work of a young and promising artist.

Among fishing themes may first be mentioned René Gilbert's "Lone Fisherman," for which was awarded a grand prize at the Paris Exposition of 1889. Dominique Rozier's painting represents a wharf at Dieppe, on which is a glistening heap of mackerel, with fishermen counting their catch. "Fisherwomen at Cancale," and "A Dock at Antwerp" are from the brush of Marie Auguste Flameng, a salon medallist, and one noted for the truthfulness of her marine and landscape compositions. "Fish," by Guillaume R. Fouace, shows the vigor of execution characteristic of this artist, whose fame was won as a portrait painter. So with "Good Fishing," by Victor Gabriel Gilbert, whose favorite themes are market scenes, among which may be mentioned his "Sunday Afternoon in a Parisian Market."

France is a nation of artists and soldiers, and with her painters and sculptors, especially since the days of Napoleon, war has ever been a favorite theme. "Bonaparte in Italy," by Boutigny, is an excellent representation of the great general who answered thence with victory and scorn the remonstrances of the directory. The scene of "Combat in a Village" is an open plaza, where at early morn the pale sunlight shines faintly through the crisp atmosphere, on one side an old-fashioned diligence, and on another a fountain whose waters are plashing forth beneath the shade of trees. A bugler is sounding the attack, and

men are dashing past the fountain or approaching the square from one of the streets near by. A few are stricken down; but the fight is young, and the smoke from the windows of adjacent buildings shows that they are occupied by the enemy in force. In this as in other subjects descriptive of the Franco-Prussian war, the valor of the French soldiery suggests the motif, many of them indicating the turning point of the contest, while in others the result is left in doubt.

In "Pichegru Taking the Dutch Ships on Zuyder Zee," by Charles Edouard Delort, is presented one of the strangest events in the annals of warfare, the fleet being captured by cavalry while imbedded in the ice. "A Barricade of 1830," by George Cain, represents a squadron of cavalry charging hopelessly at the



UNE RESTORATION EDOUARD DANTAN



READY FOR THE GARDEN PARTY. MACHARD



WOMEN ON THE SEASHORE. AUBLET



barrier, while under a point blank fire from its defenders and from the houses on every side. Morot de Tours' "Carnot at Wattignie's" shows the grandfather of the president at the head of his command. "The Return of the Regiment," by Julien Le Blant, portrays a battalion of starved and half-clad soldiers welcomed home as victors by the Parisian populace. A repulsive incident of the Vendean war is shown in Paul Grolleron's "A Capture in 1793," in which a group of brutish peasantry are binding and maltreating their prisoner. Of two canvases by Georges Rochegrosse, "The Spoil" depicts an Assyrian soldier guarding a pile of plunder and a group of female captives. Garrison life is touched upon in Eugene Chaperon's "Douche au Regiment," Marius Roy's "Zouaves and Foot Soldiers on Duty" and Loustannau's "Presentation of the Standard to Recruits," "Bridge Work at Bougeval," by the last of these artists, showing the process of constructing a pontoon. Nor should we omit from the list of military subjects Bertreaux' "Return of a Deserter," Dieterle's "The Cavalry at Criquebeuf," Guignard's "Scouts in Flight," and Dumaresque's "Napoleon Asleep in a Hut," the last a celebrated painter of historic subjects.



LE GUEPIER. BOUGUEREAU

Turning to religious themes may first be mentioned "The Women at the Tomb" and "Our Lady of the Angels," by William Adolphe Bouguereau, whose scriptural, classic, and mythologic paintings have found a place in the salons for well-nigh half a century. The subject of "The Women at the Tomb" was suggested by the following passage from St Matthew, one of the most solemn and graphic in the New Testament, and here needing no apology for its reproduction: "In the end of the Sabbath, as it began to dawn toward the first day of the week, came Mary Magdalene, and the other Mary, to see the sepulchre. And, behold, there was a great earthquake; for the angel of the Lord descended from heaven, and came and rolled back the stone from the door, and sat upon it. His countenance was like lightning, and his raiment white as snow; and for fear of him the keepers did shake and became as dead men. And the angel answered and said unto the women, 'Fear not ye; for I know that ye seek Jesus, which was crucified. He is not here; for he is risen as he said. Come, see the place where the Lord lay.'"

The figures are admirably grouped, all with Hebraic cast of countenance and in Hebraic garb—long, flowing robes over which the head-dress falls below the waist. Only two of the faces are shown and in them is an expression of profoundest reverence and awe, but without any symptom of fear. The stone is standing close to the portal of the sepulchre, and within is the angel, his hand pointing upward, severe and majestic of mien, his form and features dimly outlined, but radiant with a glow of supernatural brightness. The entire composition is admirably conceived and executed, with masterly and respectful treatment, a relief in truth from the superficial, irreverent tone all too characteristic of the French method of dealing with sacred subjects. "Our Lady of the Angels" is also an excellent composition, with expression of features as of one beatified and blessed above all other women. Contrast with these and other of Bouguereau's scriptural themes his "Le Guépier," or "The Wasps' Nest," the wasps being here transformed into Cupids and their stings into arrows, and we recognize, without going further, his strength and range in art. Of the idyllic school he is one of the leading masters, and few there are whose works have been so widely appreciated throughout the world.

A modern and somewhat irreverent version of "The Descent from the Cross" is that of Jean Beraud. As here portrayed, the tragedy is consummated on the hill of Montmartre; darkness broods over the scene, and around the lifeless body of Christ are gathered his adherents, clad in the jumpers and blouses of Parisian workmen, his mother crowned with a halo but represented as an elderly woman, without attempt at idealization. Near by a repulsive figure of the socialistic type, shakes his clenched fist at the city lying beneath. To many this picture was one of the most fascinating in the French collection, not for its merit, but for the boldness of its anachronism and disrespect. Judging it merely as a work of art, aside from all considerations of religious motive or sentiment, it does not appear what there is to be gained by thus degrading a study whose theme is the greatest of all human tragedies into what might be a mere incident in the annals of the commune, were crucifixion then an orthodox mode of capital punishment. "The Host," by Jacques Emile Blanche, represents,



THE WOMEN AT THE TOMB

From painting in oil by Delacroix



without trace of dignity or feeling, Christ breaking bread in the household of a humble family. Among the best works of this character is François Flemeng's "The Flight into Egypt," beautifully executed on panels. "The Blind Men of Jericho," by Paul Leroy is chiefly remarkable for its size. In other canvases is depicted the usual range of biblical subjects, among which may be specially mentioned "The Annunciation," by Alfred Pierre Agache; Max Leenhardt's "Mary Magdalene;" Albert Dawant's "Close of the Mass;" Tissot's paintings of "The Prodigal Son" and "The Fatted Calf." The familiar subject of Christ walking on the water and his apostles crowding to the edge of their boat is well depicted by Duez; but one fails to see why breakers should appear in the midst of the sea of Galilee. Among religious topics may also be classed "Fugitive Protestants, 1685," by Maurice Leloir, whose brush has been largely occupied with scriptural themes.



PAINTINGS IN THE ITALIAN SECTION

Of paintings in water colors there is a valuable collection from the society of French water color artists. Military themes here find expression in Detaille's "Soldiers of the Imperial Guard" and Jeanniot's "Troopers on the March," the latter in humorous vein, showing a group of jaded soldiery trudging through rain and mud. In landscape there are canvases or drawings from Gaston Bethune, Dubufe, and Edmond Charles Yon; and among private exhibitors, from D'Augence, Iwill, Mouren, and Pointelin. Marine views, portraiture, religious, historic and nearly all other subjects depicted in the galleries of oil paintings are also represented on a minor scale. Other collections are from the Society of French pastel artists and the Museum of decorative arts. Of fired pottery there are many artistic specimens, and in ecclesiastical and other architecture there are valuable studies apart from the historical exhibits already mentioned.

Statuary is the strongest feature in the Italian section, both as to number and quality of exhibits, of which there are nearly 300 in marble, clay, and bronze; in terra cotta and alabaster; in silver, copper, and brass. As with the paintings, and especially the water colors, the display is of a national character, almost without trace of alienism, but with a certain redundancy of theme and an absence of that cardinal virtue in all true works of art, the virtue of simplicity. Often the effect is marred by superfluity of ornament or too much straining after effect, widely removed from the classic compositions of the old masters, whose works they profess to imitate. Here, it may be observed, is for the first time displayed, outside its native home, a representative collection of Italian art; for while Italian sculptors and painters have found a place at former expositions, for the most part they are little known in foreign lands.

Of Adolf Apolloni's statues there are none more famous than his "Mater Purissima," a work of infinite feeling, dignity, and grace, albeit, apart from the aureole, with little suggestion of the divine; a beautiful and ideal woman, but still only a woman. "Love's Dream" is a veiled marble head, reproducing, it is said, the



uplifted with the gladsome look of one who is listening to pleasant tidings. The marble busts of Chauncey M. Depew and Julia Ward Howe are in the happiest vein of this master of plastic art, who knows well how to adapt to modern compositions the classic beauties of the antique.

Another disciple of the classic masters is De Paoli, whose "Icarus" is almost faultless in outline, though its features fail to express the intensity of passion pertaining to the theme. So with Calvi's busts in marble and bronze, whose "Othello" is notably deficient in dignity and force. A more powerful delineation is Trentanove's "The Last of the Spartans," showing the recumbent form of a vanquished warrior, whose head is soon to fall on his prostrate shield. The figure is perfectly modelled, especially as to muscular effect, expressive of stubborn resistance and unwilling surrender. Not only in conception but in anatomical fidelity of execution, this is one of the strongest works in the Italian galleries. In Pardo's bronze bust of Columbus

fair young features of his wife, with whom until the day of her death he lived happily. "Beatrice," a marble medallion, is a chaste and spiritual conception. A design for a monumental fountain representing the contorted figure of a man struggling with marine monsters is powerful in delineation but somewhat faulty in balancing. In a plaster cast of a monument of Robert Burns is no hint of the freedom and jollity of Scotch rural life; no suggestion of Scotch heather or highland whisky; merely an Italianized translation into sculpture of the plough-boy and poet, as though "The Deil and Doctor Hornbrook" had been rendered in the smooth diction of the Campagna. "American Mythology" embodies in a nude and voluptuous female form, rotund but not without symmetry of outline, the spirit of new world progress. The figure stands on a pedestal, the weight of the body resting on the right foot, which is slightly advanced. The left hand is extended as though commanding silence; in the right is a telephone tube held close to the ear, and the face is



DAY AND NIGHT. MEDALLIONS BY DAUSCH





"THE LAST OF THE SPARTANS."



A STUDY IN PLASTER

the features of the discoverer are barely recognizable; for though as a bust it is not without merit, it fails to represent the ideal qualities associated with his name.

It is somewhat strange that for a bust of the president of the United States we must search the Italian galleries; but so it is; for there is none in the section where it would seem to belong. The bust is by Luzi, who in other themes approaches more nearly to the original; for there is little here that suggests the features of Grover Cleveland. Ferrari's "Lincoln Dying" represents its subject with the emancipation proclamation on his knee, and though not historically accurate, is a powerful work. From several artists, and especially from Barbella, are pretty conceits in bronze and marble statuettes, some of them depicting scenes in common life, with remarkable purity of motif and suppleness of design. These are what may be termed the genre of statuary. Less to be commended are the over-draped figures of continents and other subjects in the gallery, several of which appear as though placed there in order to display their rich attire and ornaments. While the features are good, the effect is marred by these extraneous adjuncts, detracting as they do from the dignity of sculptural art.

Dausch's "Day" and "Night," two marble medallions in relief, are chaste and elegant studies, albeit with too much of the statuesque. But the feature in the Italian galleries is the reproduction, from the collection in the national museum at Naples, of classic bronzes, most of them found amid the excavations at Pompeii and Herculaneum. All of them are of such perfect workmanship that they might well have passed for the originals, the hues resulting from

corrosion and fire, and even the blemishes, being faithfully imitated. The figures include many of the heroes, gods, and demi-gods of antiquity, with men famous in the sphere of science and literature. Apollo is here with his plectrum, Mercury springing into air, Hercules taming a stag, Silenus astride of his wine-skin, Cupid with his mask, and Venus rising from the bath. Of warriors there are Alexander and Scipio Africanus; of philosophers, Epicurus, Seneca, and Democritus; of orators and poets, Demosthenes, Sappho, and Dante. There are dancing and drunken fauns, satyrs and centaurs, dirk throwers and dancing girls, the latter in the scantiest of classic drapery. In a mutilated statue of Psyche, worthy of Praxiteles, is wonderful grace of form and expression of feature. A small winged figure of Victory, poised on a globe, is one of the most beautiful among the statuettes. The helmet and greaves of a gladiator are reproduced in fac-simile, the former ornamented with bas-reliefs representing the sack of Troy. There are also many articles intended for domestic and sacerdotal use and ornament, as vases, jugs, and libation cups; door-knockers, lamps, candelabra, and tripods; all of most finished execution.

Religious themes are one of the strongest features in the Italian display of oil paintings, though here are none of the subjects depicted by the old masters. In this department Corelli's large painting, "The Angelus on St Peter's Day," is one of the strongest of its class. Its subject is a harvest scene, in the neighborhood of Rome, where, as the legend relates, the barren soil bloomed forth under the tread of St Peter's bruised and bleeding feet as he crossed the Campagna on his way to suffer martyrdom. As the solemn tones of the Angelus are wafted on the still evening air, the laborers cease from toil and some are bowed in prayer. On one side the crumbling ruins of an aqueduct are flooded with golden light, and far toward the horizon waving fields of grain, rustled by the summer breeze, stretch forth to meet the sunset sky. While in some respects inferior to Millet's "Angelus," it is more virile in treatment, with greater freedom and plasticity of modelling; but the two cannot well be compared, for they are in entirely different veins, the one representing what may be termed epic and the other lyric art. By Corelli is also a pleasing woodland sketch, with strong contrast of light and shade in its dark green foliage, its dew-besprinkled herbage, and its gnarled and aged oak. The scene is essentially Greek, one where fauns and dryads might love to dwell or Artemis linger in the chase.

Venice has been painted a thousand times, and in every conceivable style of art, but by none more faithfully than Guglielmo Clardi, several of whose canvases are studies on the bay and the lagoons. His "Spring Clouds" and "Southwest Wind" are both in subdued and delicate tones; but in "Sunset at Venice" we at length have Venice as she is, in her sombre moods at least, and without the brilliancy of coloring which



many artists have deemed inseparable from this subject. Over the city and its waters broods a soft gray mist, penetrated by the faint golden hue of twilight, giving to the theme an aspect of repose. The picture is admirably finished; nothing is omitted from this beautiful composition, and there is nothing out of place. From the fertile brush of Carcano comes a collection of itself, including landscape, marine, and interior views, one of them a richly colored painting of "Lombard Plain" and representing Venice as seen from the lagoon. Gabrini's "At Sea" is not without merit, though in treatment, and especially in color scheme, too broadly suggestive of the French impressionist school.

In portraiture there is Guardabassi's painting of Leo XIII, painted from life in January, 1893, and in the Vatican, beyond whose walls the pope is never seen. Though the work of a young artist, it is of strongly individual character. In this pallid face with its fringe of white locks, in the wonderful light of the piercing eyes, and the thin transparent hands, is almost a superhuman expression, with nothing of the ambitious potentate as represented in the canvases of Lenbach and Chartrain. The Boldini portraits are in original vein and well executed, except for too much elongation of form. Bottero's "Jurors" is an excellent piece of figure painting, as also are Guardabassi's "The Old Gypsy's Prediction" and Simoni's "Algerian Women on the Terrace." "The Ill Fed" and "At the Pawn Shop," by Da Molin, are vigorous conceptions and thoroughly typical of the country in which he lives.

An excellent painting is Savini's "Post Nubila Phœbus," the scene of which is an elaborately furnished and decorated Louis XIV interior, and the subject a young couple between whom is the width of a sofa; for the pair are quarrelling, or rather ending a quarrel. The lady has the best of it, as appears in her tilted chin and defiant gaze, the lines softening around the deep-set eyes of the other, on whose features is the annoyed and yet half-amused expression with which man is apt to regard a handsome woman in her wrath. In contrast with this is Corteggiani's sombre but powerful theme, the "Capuchins' Catacombs," representing the dead friars swaying in their stalls, and a sorrowing woman kneeling over the body of her infant.

In genre paintings one of the most pleasing compositions is Stefano Novo's "Worst of All," representing a Venetian interior with a class centre of interest is an maiden who has thrown lace on the against the

of young girls learning the art of making lace. The angry and disconsolate little over her chair and flung her floor. Her head is pressed wall, and in her figure is the crouching attitude of a child under



GONDOLA ON THE LAGOON



LOS PESCADORES PESCADOS

From group in plaster by A. Marín y García



censure and ridicule. The teacher, a comely damsel with a yellow rose in her hair, is pointing out her errors as a warning to the rest of her pupils, one of whom is maliciously enjoying the situation, and impatiently biding her opportunity to revile and persecute the culprit. In still life there are some excellent studies, especially in fruits and flowers, with exceeding richness of coloring and perhaps something too much of detail.

In water colors the Italian section contains about a score of canvases. Most of them are in the pure Italian style which differs essentially from the mannerism of the French and the monotonous treatment of English and American schools; for in this department the Italian is an adept, often conveying more meaning in his aquarelles than is expressed by paintings in oil. Aureli's single work, whose subject is the presentation of Richelieu to Henri IV of France is remarkable for the skilful grouping and balance of its figures. Pennacchini's "The Lost Child" and "Tarantella" are powerful and antithetical compositions, one depicting death's agony and the other a dance and festival. Simoni's "The Last Day of the Ramadam" is a well executed Arab scene, and Corelli has heads of Latium peasants, of colossal size but skilfully modelled. The few pastels here displayed, and especially Capranica's "Thecla," the patron saint of the east, and "Truth," with its poetic idealism and rich low-toned coloring, are excellent illustrations of what can be accomplished in a branch of art which in less able hands too often becomes a feeble and lifeless medium of expression.

From Spain comes a moderate collection; but one in which few of her great artists are represented, and these, for the most part, not by their choicest works. From Fortuny, the late founder of the modern school, and from Raimundo Madrazo, there is not a single canvas, though both have countless imitators; nor is there anything to remind us of the glories of Velasquez and Murillo. The sterility of Spanish art is certainly not due to lack of artistic ability, but rather to the want of sympathy and appreciation; for about the only works that Spaniards will accept from native artists are in the line of portraiture. Thus it is that the national academy is less in favor than the Spanish academy at Rome, and that to win a scholarship which will admit him to the latter is the highest ambition of the student.

Of the statuary, largely in plaster and baked clay, it is unnecessary to make other than briefest mention. Among the best of the exhibits are those which come from the national museum, from which there are several contributions. Worthy of note also are the groups by Marinas y Garcia, of one of which the title, rendered in English, is "The Fishers Caught," and of the other a similar title in Spanish—"Los Pescadores Pescados." In both the expression of pain and terror is the strongest feature in the composition; but excellent is the muscular as well as the facial treatment. They are not attractive themes; but they are among the most powerful specimens of plastic art in the Spanish galleries.

From the national museum are also several paintings, first of which may be noticed Eduardo Rosales' "Isabella the Catholic Dictating Her Will," a pleasing but not a powerful work, and one free from the garishness of coloring with which the disciples of Fortuny are apt to bedaub their canvases. "Italian Girl" and "Landscape" are also studies by this artist, who, it may be said, is a pupil of the Madrazos, a director of the academy, and a frequent exhibitor in Parisian salons, receiving the legion of honor in 1867. "Communion on Board Ship," by Martinez, and "Conversion of the Duke of Candia," by Carboreno, are large and somewhat commonplace paintings, with hardly enough of merit to justify their proportions. Both are lacking



GODDESS OF FORTUNE. BERNARDELLI

in concentration, the subject being expressed in surface of paint rather than in crystallization of thought; yet both are men of note, the smaller works of the latter showing strong individuality combined with singular delicacy of touch. Completing the list of academy paintings are Andrade's "An Anniversary" and Munoz-Degrain's "The Lovers of Teruel," a grewsome love-making by an artist who would have appeared to much better advantage in his "Don Quixote and the Windmill," which finds no place in the collection.

Among Joaquin Sorolla's studies the preference is given to "Another Marguerite," showing an unfortunate woman, who has erred as did Goethe's creation, seated in a car with manacled arms, on her way to prison.



CHRIST AND THE ADULTERESS. MARBLE GROUP BY BERNARDELLI

Her head is bowed in shame, and in the features is an expression of unutterable despair which arouses even the pity of the gendarmes at her side. "Sisters of Charity" and "To the Health of the Bride" are from the versatile brush of Joaquin Agrasot y Juan, whose subjects vary from bull fights to religious and historic themes. Both his works show virile treatment, with vigorous color scheme, and are especially strong in perspective. Among Texidor y Torres' paintings is his "Infortunio," which is too well known to require description. On Xumetra's panels a group of half-nude figures representing the liberal arts reflects the ideal beauty of the south. Maura y Montaner has among his pictures a life-like street scene in Madrid. "The Visit" is the work of Luis Alvarez, who has found many patrons in America, and is best known by his "Cardinal's Reception" and "The Spanish Birthday Festival." "The Royal Ball" and "Venetian Terrace" are by Manuel Dominguez, more famed as a portrait and historic painter. While facile in execution the effect is marred by over-coloring. Ricardo, the brother of Raimundo Madrazo, has two of his studies on exhibition, but is not represented in water-colors, wherein he most excels. Garnero and Joaquin Turina portray the oft-told

tale of the Columbian voyages in somewhat commonplace fashion and without any novel or interesting features.

In landscape and marine subjects there are three valuable contributions from Roig y Soler, especially his "Beach at Blanes," with its border of sand-dunes and the blue sea beyond. Arpa-y-Perea has some striking scenes painted on a background of silvery gray. Campuzano's "Cantabrian Coast" is beautiful in tone, subdued in coloring, and with singular fidelity of detail. Of military themes, those of Cusachs-y-Cusachs, representing cavalry on the march, are among the most spirited. Worthy of note also are Esteban-y-Vivero's "Flying Artillery" and Gonzalez-Simancas' "Flank Attack" and "After the Battle." In still-life and genre paintings



there are several excellent works, especially those of Clemente-y-Peru. Gonzalvo Perez has three of his finest architectural paintings, showing St Mark's at Venice, with its chapel of St Isodoro and the Arabian tower at Saragossa. In Lopez Cantero's "Sala de Ambajadores" is a rich but somewhat gaudy interior, with carvings in ivory and gold, jewelled casements, and other suggestions of mediæval luxury and splendor.

Mexico is the only Spanish-American country which finds expression in the art galleries, and it may be said was one of the few to which was awarded all the space applied for. The exhibition consists mainly of historic and religious themes, portraiture, and landscapes, with other subjects more slightly represented. Sculpture is almost restricted to national characters, including busts of Porfirio Diaz, Benito Juarez, Carlos Pacheco, and Felipe Berriozabal, by Guerra and Contreras. And so with the paintings, many of which relate to the historic scenes and personages of Mexico, in strong contrast with the alienism of the United States collections. Among them are Coto's views of Chapultepec and Molino del Rey, the former also depicted by Almanza, among whose works are "Ruins of Quesnada" and "The Tree of the Noche Triste." The founding of the present city of Mexico in 1521 is depicted by Jara and Yzaguirre, by the latter of whom is "Columbus at the Rabida." Pesado selects for one of his topics Bravo pardoning the Spanish prisoners after hearing of his father's assassination by the Spaniards. The square of Guadalupe Hidalgo occupies the brush of Adolfo Tenorio, and the fifteen canvases of Velasco are nearly all descriptive of the annals or scenic wonders of his native land. Aztec legendry is also freely illustrated, and of works in lighter vein there are presentable studies in oil and water colors, drawings, engravings, and etchings.

To many the Mexican alcoves were somewhat of a surprise, and though with more of promise than performance, contain works of unquestionable merit. In few countries is the artistic faculty so common, though as yet but little developed, as compared with more favored communities. The Aztecs, as all the world knows, rivalled the European masters in their skilful blending of colors; and in architecture their decorative schemes would bear comparison with those of the Greeks. Art languished

under the viceroys, and even after the opening of the Real Academia de Bellas Artes de San Carlos in 1773, development was retarded by lack of patronage and a too rigid adherence to Spanish methods. Then came the war of independence, followed by the Maximilian episode, and with revolutions and counter-revolutions lasting until the régime of Porfirio Diaz put an end to internal strife. Under such conditions progress was impossible; for art, like capital, demands security and a settled order of things. The establishment of the Escuela Nacional, with its valuable collection of paintings and statuary, including the choicest works to be found in the convents, gave to Mexico its first real school of art, and largely to the influence of this school is due the creditable representation of Mexican art at the Columbian Exposition,



THE MOTHER. BERNARDELLI

Venezuela's collection, though contained in her government building, and to be further mentioned in that connection, belongs to the department of Fine Arts, and was examined by the international board. That it was not placed among the rest is due to the tardy application for space, which was not received until the entire area had been assigned.

Portugal is not represented in the palace of Fine Arts; but Brazil, her republican offspring, has a small collection, appearing to better advantage in her government building, presently to be described. In statuary the only works are by Rodolpho Bernardelli, whose compositions include a figure of "Fortuna," neatly moulded as to face and form, and skilfully executed in pose. His marble group named "Christ and the Adulteress," is a bold conception, boldly executed, with facial expression of strong Hebraic type, and with no suggestion of divinity or even of spirituality. There are the full oriental features characteristic of David's race, as he pleads in impassioned tones, one arm extended with authoritative gesture and the other protecting the figure crouching at his feet. It is a spirited group, dramatic and strongly materialistic, differing as widely from conventional types as Beraud's "Descent from the Cross." A beautiful landscape scene by Boaventura is displayed in the Brazilian galleries, where also are canvases by Fiuza, Visconti, and Brocos, the last with numerous subjects

ranging from portraiture to marine views. From the fertile brush of Henrique Barnardelli are also many paintings, one of the best of which represents a mother suckling her babe. In still life there are studies by Frederico Raphael. Girardet has a group of medallions and cameos, one of them a portrait of Benjamin Constant and others depicting various themes from ballet girls to national symbolism.



AN EQUESTRIENNE. LAVERY

Turning to northern art centres, we find in this department one of the few in which Great Britain is represented as befits her achievements and capabilities; for among these scores of galleries and alcoves her collection is almost the only one which has exceeded expectation. In former years it was said that England had no indigenous school of painters, and that none could exist in a country which afforded no special facilities for training, nor even an art academy worthy of the name. In the Paris Exhibition of 1855 a small collection of British paintings, hung in an obscure corner of the building, was somewhat of a surprise to foreign critics, for here was a school whose works were based on the study of nature, one entirely *sui generis*, and refusing to acknowledge the formulæ established by academic tradition. The impression thus made was strengthened at later international expositions, the artistic influence of which was felt by British painters, causing them to modify the extreme naturalism of their compositions, and without loss of strength, to give to them more of an artistic character in tone and finish.

In portraiture the British galleries are strong, and among them may still be found the spirit, if not the canvases of Joshua Reynolds and Thomas Gainsborough. But it is in landscape and marine paintings that England most excels, and here it may almost be said, though other nations were first in the field, is the home of landscape art. To this all the conditions are favorable, the love of scenery and out-door life giving to the people a taste for such subjects and to the real artist unstinted patronage. To find themes for his brush the painter need not go beyond his native land; for in few countries is there a more diversified configuration of surface, a more striking contour of coast line, more picturesque inland waters, more wealth of verdure and forest growth, while above all is an ever-changing sky, seldom clear and rarely at rest, with moods as fickle as the ocean from whose bright and breezy surface are reflected its shifting hues.

By J. G. Hodgson, a professor of painting in the Royal academy, the typical English landscape is thus described, and the description is one that applies to many of the subjects portrayed in the British section: "Scattered irregularly on a slope of emerald green meadows is a country village; its old brick and timber cottages are roofed with moss-grown tiles or thatched with straw; hard by stands an ancient church with a low square tower under the shadow of tall elms almost as ancient; a great yew tree spreads its gnarled branches over the mouldering tombstones in the churchyard, and overhead the rooks are circling in the evening sky. It is a scene which belongs to an old world, and lies remote from the storm and stress of modern life—hence perhaps its popularity as a picture. Certain it is that a sense of remoteness, of peacefulness and seclusion



are the prevailing sentiments which can be traced like a dominant chord running through the entire mass of British landscape art."

In sculpture Britain finds adequate expression; though here, as in other countries, this art is little encouraged and its market almost restricted to state and municipal requirements, for homes and thoroughfares are too much crowded with living beings to make room for inanimate forms. Both in sculpture and painting, but especially in the former, there are strong traces of the French school, tempering the harshness of British naturalism without depriving it of its distinctive character. In architecture decided progress is indicated, as compared with former exhibitions, though it is only within the last score of years that the decoration of business buildings and the cheaper class of residences has been tolerated, so far at least as to relieve their grim uniformity of outline.

Out of more than 1,100 exhibits in the British galleries, only 50 are of statuary, for while fairly represented, in quality at least, sculpture is the least prominent feature in English art, much less so than in the artistic centres of the continent. Of four studies by Thornycroft, one is of Edward I and another of Teucer, a loan from the Chicago Art institute. "Needless Alarm" and "The Sluggard" are the works of Sir Frederick

Leighton, president of the Royal academy, chairman of the committee and a member of the Royal commission of Fine Arts. His oil paintings are a feature in the British section, as also are those of Watts, who has here a statue of "Clytie." From the late Thomas Woolner are busts of Tennyson, Carlyle, Gladstone, and Cardinal Newman. Among others worthy of note are Dressler's "Bacchante," MacLean's "Tragedy" and "Comedy," Bates's "Endymion," Ford's "Henry Irving as Hamlet," Miss Brown's marble group of "The Pearl," and Miss Montalba's "Boy Catching a Crab."

Among some 450 paintings in oil and more than 200 water-colors, there are enough of merit to leaven the mass of mediocre compositions forwarded to Chicago in the hope of gaining a foothold in the markets of the United States, now virtually occupied by the French. While here are no masterpieces from the National or South Kensington galleries, and but few from those of private individuals, there is nevertheless an adequate representation of contemporary art. If Turner and Constable, Reynolds and Landseer are not here, there are Leighton and Watts, Poynter and Millais, Riviere and John M. Swan, Herkomer, Frith, and Stanhope Forbes, Gilbert and Linton, and a score of others whose names are household words throughout the land. Here are represented all whose works are familiar in the Royal academy, in the Grosvenor and other galleries; but they are the works of living artists, or of those who have died so recently that their paintings belong to the modern school.

Not least among the merits of the British galleries is that they are not disfigured by a redundancy of commonplace portraiture, a defect which, as I have said, is all too noticeable in the American section, where the faces that look down from every wall and corner, suggest the familiar apophthegm of the Latin poet:

Spectatum veniunt; veniunt spectentur ut ipsi.

By the late Frank Holl are portraits of well-known personages, almost perfect in drawing, though somewhat hard in tone. Among them is one of John Tenniel, who since 1851 has contributed weekly to the political cartoons which have made the fame and fortune of the London *Punch*. Others are of Samuel Cousins, the royal academician; of Earl Spencer, one of the recent converts to home rule; of the late J. S. Morgan; and of General Rawlinson, renowned for his scientific acquirements no less than for his military career, and elected successor to Darwin by several learned societies.

Watts's portraits of Robert Browning and Walter Crane are in his best style, and this is saying much; for he has few equals in bringing out the more subtle traits of character. Well has he depicted the thoughtful features of the poet, with his broad expanse of forehead and his deep-set eyes, not in fine frenzy rolling but gazing inwardly as if lost in thought; while in the painter's orbs is the expression of one who sees visions that others cannot see. In his "Paolo and Francesca" is the true inspiration of an artist, seizing and intensifying the central ideas of his theme, the bitterness of remorse, the quenchless flame of love, the despair



THE PASSING CLOUD. MARCUS STONE

of doomed spirits borne on the blast through the lurid regions of Tophet. "A Welsh Girl" and "Rose Bradwardine" are by the late Edwin Long, the latter a study from *Waverley*, and of true Scottish type. Lavery's "An Equestrienne," shows a girl on horseback, with the upright figure and perfect seat of the English horsewoman.

Oules, for whose "Cardinal Manning" and "Samuel Morley" was awarded the legion of honor at the Paris Exposition of 1889, has only his portraits of Sir Donald Smith, chairman of the Hudson's Bay company, and Thomas S. Cooper, the academician, by whom was founded the Canterbury art gallery. In delineation he is at least the equal of Holl, with more versatility of expression and less austerity of coloring, his strong, firm touch commending his works to reproductive etchers. Shannon is a fashionable painter, but nevertheless a painter whose merits cannot be overlooked, for while pandering somewhat to the vanity of his patrons, he does



THE BROKEN IDOL. PRINSEP

not ignore the demands of legitimate art. The three portraits here displayed, none of them of public characters, show all the skill in composition and coloring, especially as to draperies, which have brought him into prominence in his special line.

Among animal paintings are the works of Briton Riviere and John M. Swan, the former an acknowledged master in the older style of modern art, and the latter one of the most promising of the younger school. In Riviere's "Daniel" the back of the figure is portrayed; but the expression of the face can almost be read in the subdued and crouching attitude of the lions. In "The Magician's Doorway" a leopard and a tiger are chained at the portal of an oriental palace, with columns and floors of marble, where the owner practises his mysterious art, and where none may enter without the password. "Requiescat" has in the foreground a noble-looking dog, watching by the bier of his master, a knight in full armor, covered with a white robe richly embroidered by a woman's hands. Only the dog is there, awaiting with pitiful aspect some sign of recognition from one who will know him no more. In his "Fallen Monarch" Swan takes for his subject a lion slain in the midst of a desert, vast and lonesome as the wastes of ocean. He lies on his back, his fore-legs bound together and his head hanging over a ledge of rock. Around him are the weapons of his conquerors, none of whom are in sight, nor any living thing to relieve this utter solitude. It is not an attractive picture, but it is vigorous and original in treatment, and with no striving after effect, everything being held in subjection to its salient features. "Maternity" represents a lioness suckling her young, with a fierce and dangerous look in her



yellow eyes which the boldest hunter would not care to meet.

Except for a portrait of Captain Burton, Sir Frederick Leighton's canvases are all descriptive of mythological subjects. His "Hercules Wrestling with Death for the Body of Alcestis" is a most powerful and erudite composition, subtle in conception and strong in execution, expressing, as never before was expressed on canvas, the sublimation of its theme. Though painted more than a score of years ago, in some respects it has never been surpassed by the brush of this accomplished artist.



ROCKED IN THE CRADLE OF THE DEEP. MACALLUM

Especially fine is the muscular play in the stalwart figure of Hercules, his tense and massive frame standing forth as the very embodiment of strength and fearlessness. He is seizing the king of terrors by the throat, and under his tremendous grasp pale Death himself grows paler, his form bent backward under the strain. In "Perseus and Andromeda" the dragon is portrayed with its wings overshadowing the intended victim, the neck and head on one side and on the other the tail extending to the water's edge. The arrow from the bow of Perseus has taken effect; for the flame-breathing monster is writhing with pain. The figures in "Garden of the Hesperides" are superbly modelled, sensuous in outline and coloring, and rich with the flavor of classic lore. At the foot of a tree, beneath the golden apples presented to Juno as her marriage gift, reclines the fair daughter of Hesperus, her waist encircled by a snake whose head she is caressing. At first sight there is something repulsive in this body of a beautiful woman enfolded in the coils of a snake; but the latter, it should be remembered, was a guardian of the apples, in common with the Hesperides, and the potency of the siren's charm is further suggested by her subjugation of the dragon.

"Orpheus" is the only painting from the brush of Solomon J. Solomon, a young and promising artist, on whom, as some critics opine, the mantle of Sir Frederick will descend. At present, however, his style is yet in the formative period, and with more warmth of treatment than is usually found in British home-bred art; for he has travelled and studied much and to better purpose than most of his brethren of the craft. Kennedy's "Perseus" is the work of one of the large class of artists whose ambition far outruns their power of execution, its crudeness of drawing and feebleness of expression contrasting sharply with Leighton's masterly touch.

Dicksee's "Passing of Arthur" is one of the gems in the British collection. The sword Excalibur has been cast into the mere; has been grasped by the arm "clothed in white samite, mystic, wonderful." After twice giving way to his longing to possess this priceless treasure, Sir Bedivere has at length obeyed the king's behest, awed by his threat to "rise and slay him with his hands." Arthur has been borne to the marge of the mere, and the subject is faithfully rendered after Tennyson's lines beginning,

Then saw they how there hove a dusky barge,  
Dark as a funeral scarf from stem to stern,  
Beneath them and descending they were 'ware  
That all the decks were dense with stately forms,  
Black-stoled, black-hooded, like a dream—by these  
Three queens with crowns of gold.

Admirably is the mysticism of the theme suggested in these hooded figures, in the sorrowing queens with Arthur in their midst, and in the moon-lit mere with the dim shore beyond. In "The Redemption of Tannhauser," Dicksee has chosen the moment when its subject kneels repentant and in pilgrim garb at the bier of Elizabeth, with Venus, his tempter, disappearing in the background. It is a most expressive picture, one not inferior in dramatic power to the "Passing of Arthur."

Alma Tadema's "The Sculpture Gallery" is one of the largest and best of his pictures, and little if at all inferior to it are his "Audience at Agrippa's" and "A Dedication to Bacchus." The latter, a recent work, is remarkable for warmth and richness of coloring, and few could have painted, as he has done, the marble pavements of the temple where a procession of bacchantes are waving their garlands, and near them a group of barbarians, skin-clad and dusky of hue. With masterly touch are the fluttering garments portrayed, with their delicate folds of drapery, and beautiful is the play of light through the purple canopy, touching to amethyst the spotless robes of priest and vestal virgin. Poynter's *Diadumené* has for its subject a Greek woman binding her hair before stepping into the bath. It is a nude but perfectly chaste figure, without the least suggestion of indelicacy. Other works by this celebrated master are "Under the Sea Wall," "White Roses," and "On the Terrace."

John Collier, in his "Death of Cleopatra," depicts Egypt's queen lying crowned and robed near the dim statues of departed Pharaohs. Charmian is seated at her head with fixed and steadfast gaze, striving as it would seem to pierce the shades where her mistress has gone to claim the kiss of Antony. The setting of the picture is admirable, reproducing with historic faithfulness the marble floors, the costly furniture and jewelry, and all the well-known accessories. "Circe" is represented by Collier in the usual attitude, with luminous flesh tints and hair whose color almost matches the tawny hue of the tiger that crouches at her feet, with nothing of the savage glare which the classic story suggests.

Ford Madox Brown, the acknowledged master of the preraphaelite school, has done himself an injustice by sending two of his feebler works, though worthy of a better place than was accorded them by the committee, his "Wicklif on Trial" being placed above the sky-line and his "Romeo and Juliet" hung in an obscure corner among a number of mediocre paintings. "The Passing Cloud," by Marcus Stone, tells its own story with sufficient clearness and emphasis. "The Race for Wealth" is a series of five pictures by W. P. Frith, showing, under titles which also tell their own tale, the schemings and machinations of an unscrupulous adventurer in various phases of his career. "Monmouth Pleading for his Life before James II," by the late John Pettie, is an excellent rendition of the subject, the feeble-minded prince grovelling in the dust before the



THE ROLL CALL. LADY BUTLER

Lent by Queen Victoria

feeble-witted monarch, who in dooming Monmouth to the scaffold committed one of the gravest errors of his life, and the more so that he had granted him the interview in which he sued for pardon.

Of the few religious themes which find expression in these galleries, one of the most striking is Hacker's "Christ and the Magdalen." The carpenter's son is seated at his bench, surrounded with shavings and implements of trade. His head is swathed in a turban; a single garment, and that a ragged one, enfolds his form, and his dark, pitying eyes are gazing on the penitent woman who kneels before him. It is an essentially modernized version of the subject, the features of Mary being Anglo-Saxon rather than Hebraic, while those of the Christ suggest rather a priest of Buddha, with all the Buddhist's depth of humility. In different style the messiah is treated in Frederick Goodall's "By the Sea of Galilee." Around him are persons of all ages and conditions of life gazing intently on these tristful features, where are fully interpreted the words of Isaiah inscribed on the frame: "Surely he hath borne our griefs and carried our sorrows."

In "Christianæ ad Leones," by Herbert Schmalz, Christian maidens, dragged to the Roman colosseum "with ribald jest and vile indignity," are standing amid the brutal gaze of the populace, some in terror, and some with a martyr's resignation, as they await the approach of the lions which soon will end their sufferings. Prinsep's "Broken Idol" has for his subject a Christian slave who, in a fit of religious zeal has broken one of his mistress' household gods and is brought before her to answer for his conduct. Deserving of mention are Topham's "Naaman's Wife," Walker's "Convent Garden," Rooke's "King Ahab's Coveting," Coke's "Hagar," Poole's "The Prodigal Son," and "The Church Door," by Burgess. Wyke Bayliss paints the interior of St Peters and of Amiens cathedral; from Seymour Lucas comes his "St Paul's," and from G. A. Storey, his "Padre," showing a Spanish interior. "Sunday Morning, Hadley Church," by Buxton Knight, reproduces one of the oldest of English churches, near which, at the battle of Barnet, in 1471, fell the great earl of Warwick, after a hopeless struggle against overwhelming odds. Thus came to an end the first of England's civil wars—



the so-called wars of the Roses. Finally may be noticed in this connection Horsley's "Hide and Seek," where children are at play in a Kentish churchyard, among tombs in every stage of picturesque decay.

The landscape paintings in the British section include some of the finest specimens of contemporary art; but these are too well-known to require much detail of description. Among them are "Halcyon Weather" and "Lingering Autumn," by Millais, who has also his "Ornithologist," "Last Rose of Summer," "Sweet Emma Morland," and the world-famous picture whose title is "Bubbles." Still another of his works is "Shelling Peas," where a blonde-face country maid of thoroughly English type is engaged at her task. In the gray background above her head is inscribed the dedication of the picture, "To my friend, Frederick Leighton, from John Everett Millais." "The Hamlet on the Cliff," by Peter Graham, is in his usual vigorous style, and even more so is his "Caledonia Stern and Wild." Especially fine are the sombre tints of the storm-laden clouds casting

their dun shadows athwart the verdure-clad hills, where cattle are tossing their horned heads awaiting the outbreak of the tempest. The drawing of the figures is perfect, and perfect also is the coloring, laid on with the hues which nature paints and not such as the artist imagines nature to assume. "Storm at Harvest," with its laborers hurrying for shelter from a thunder shower, is one of the best studies by the late John Linnell, rich in tone and strong in execution. Others are Boughton's "Winter Sunrise" and "Dancing Down the Hay," Aumonier's "English Wood," Brett's "Highland Summer," Davis' "Now Came Still Evening on," Cole's "Ripening Sunbeams," Fabey's "Distant View of Florence," Haggitt's "Isle of Skye from the Mainland," Johnson's "Slopes of Ben Nevis," Huson's "Mists Hung Wide o'er Moor and Fell," Leader's "Conway Bay and the Carnarvonshire Coast," Rattray's "Golden October on the Forth," and a sketch by J. W. North, who takes for his motif the Spenserian couplet:

Seest how fresh my flowers be  
spread,  
In lily white and crimson red.



CLOISTER KITCHEN. GRÜTZNER

Something more than a landscape is "The Harvest Moon," by the late G. H. Mason, a thoughtful and suggestive study of the season of year when work is over and its fruits are being garnered. Of his three other canvases the "Return from Ploughing" comes from the galleries of the queen. "Ploughing" is also the title of one of the five paintings by George Clausen, a young and talented artist, whose style is strongly suggestive of Millet, not as an imitator, but that he sets forth, as does the French master, the true pathos of peasant life and invests it with pictorial harmony of theme. A lad is guiding the team for his father who stands at the plough, and in the features of the former can clearly be traced the struggle between his sense of duty and the irksomeness of his task. Of this his father is well aware; but all must work, and in his victory over himself the boy will pave the way for greater victories, however humble may be his sphere.



"Storm Brewing" and "Sunset after a Storm" are from the brush of Henry Moore, whose marine paintings are the strongest in the British section. In the former the sea is calm; but with the calmness that precedes the tempest. Above it the clouds are rolling in heavy masses, partially obscuring a sky whose color is in harmony with the greenish blue of the waters. In the latter is well depicted the sullen aspect of an ocean on which the winds have spent their fury. Overend's "Victory" has for its subject a British frigate from which men are putting off in boats to take possession of a disabled prize. In "The Wooden Walls of Queen Victoria," Baden-Powell shows a squadron of old-fashioned battle-ships as they lay off Portsmouth dockyard more than half a century ago. In "Davy Jones' Locker," Willie depicts a sunken vessel in which a single skull is all that remains of her crew. His "Port of London" is a loan from the Fine Art society, and another of his pictures represents the emperor of Germany and the prince of Wales inspecting the steamer *Teutonic* at Spithead. Tuke's "Sailors Playing Cards" is self-explanatory, as also are J. C. Hook's "Wreckage from the Fruiter," T. Graham's "Last Boat," Brangwyn's "Convict Ship," and Clara Montalba's "Thames Barge off Chelsea." In "A Hopeless Dawn," by Frank Bramley, are vividly portrayed the anguished features of two women who have passed the night in watching, the sea, from which their loved ones will never return, telling



FISHING IN NORWAY. EKINAS

its own sad story. By Stanhope Forbes, whose pictures of coast life have been purchased for several public galleries, are "Forging the Anchor" and "Soldiers and Sailors." Many of his themes are taken from the Cornish coast and display to good advantage the facile execution of this young and talented artist, who completed under Bounat his earlier training at the National academy. In Macallum's "Rocked in the Cradle of the Deep," the rocking is done by a party of mischievous lads, and younger children are looking on in terror from the bow and stern of the boat. Among fishing themes are Smythe's "Harvest of the Sea," and "Boulogne Shrimpers," Loudan's "Fish Market, Cornwall," and Hunter's "Fishers of the North Sea."

Among military themes Sir James Linton, president of the Royal institute, has in his "Victorious" and "The Benediction" two of a series of paintings illustrating the life of a soldier. "The Last Muster," by Herkomer, is one of the best known pictures in the British section, known, that is, by countless reproductions. The pensioners of the Chelsea hospital are attending service in chapel. One of them, with head hanging forward, has died in his seat, like a soldier at his post; but of this only a few are aware, most of them listening devoutly to what is being said, for soon they also will enter on their rest, as the reward for duty nobly done and sufferings patiently endured. The bright red of the scarlet uniforms is relieved by the light that comes from the windows and the brownish tints of the wainscoting; yet it is somewhat over-colored, a rare defect in England's collection, which inclines rather to sombreness and austerity of hue. Other of Herkomer's canvases are "Miss Katharine Grant" and "Entranced," whose motif is explained by the line inscribed below:

In some diviner mood of self-oblivion solitude.

In "Sons of the Brave," by Philip R. Morris, the scene is also at Chelsea, at the duke of York's school for soldiers' orphan boys. Headed by their own band, the lads are marching forth to meet their relatives and friends, who are crowding around the gateway—a privilege granted only once a week; for they are being trained as soldiers and the strictest of discipline is maintained. Yeames' "Prisoners of War" is an incident of the Napoleonic era, and in Glazebrook's "C'est l'Empereur" we have Napoleon himself who, as the story goes,





PSYCHE. THUMANN

finding one of his sentries asleep, quietly took from him his musket and himself stood guard until he awoke. But this is not the story that the picture tells; for the emperor is gazing with fixed and fateful look on the worn-out sentinel whom he has roused from troubled dreams. Charlton has an ambitious painting of the royal jubilee procession passing through Trafalgar square, and in another canvas depicts an incident in the charge of the light brigade where the riderless horses of the slain, on hearing the bugle-call, fall into line with the heavy brigade as it advances to cover the retreat.

Women are well represented in the British section, and it is somewhat remarkable that the best of the military paintings should be from a woman's brush. Lady Butler, among whose best known canvases are "Quatre Bras" and "Balaclava," has here "The Roll Call," first exhibited at the Royal academy in 1874 and now the property of the queen. After the battle of Inkermann, a regiment of the grenadier guards, or rather that which remains of it, is being inspected by its colonel, who is riding past

its diminished ranks. It is a strong and impressive study, strong in its simplicity, its pathos, and its fidelity to truth. Says the *London Art Journal*, "In this line of soldiers worn out with conflict, some wounded, others fallen with their dying faces cleaving the snow, there is the terrible but passionless severity of absolute fact. The supreme merit of the work, in an artistic sense, lies in this very quality of perfect self-control that refuses to emphasize any further the misery which has already occurred."

One of the most beautiful faces in the British section is that of Mrs Jopling-Rowe's "Dear Lady Disdain." The figure is standing in profile, richly but simply attired, and in these proud, aristocratic features, somewhat of the Beatrice type, is fully expressed the title of the picture. As loans from their owners are three canvases by Mrs Alma Tadema, whose "Blue Stockings," exhibited at the academy in 1877 and in the following year at Paris, first established her fame. Miss Childers sends her "Last Survivor of Trafalgar," who died in 1892, aged 100 years; Miss Cohen has her "Little Refugee from Russia," and Madame Canziani her "Two Little Home Rulers," the sons of the Earl of Aberdeen, to whom the paintings belong. Among others are "The Witch," by Mrs Stanhope Forbes; a "Water Nymph," by Blanche Jenkins; "In the Reign of Terror," and "The Mistletoe Bough," by Miss Macgregor; "Eve" by Mrs Anna Lea Merritt, and "The Card Dealer," by Mrs Mary L. Waller.

To describe in detail the British paintings in water colors would be a tiresome repetition of what has already been said, and the more so that they include contributions from several artists whose works have already been passed in review. In the engravings, etchings, and drawings also reappear not a few of the familiar names, as John M. Swan and W. H. Overend, while Tenniel has a number of sketches such as only he can limn.





FEAST IN THE DOG'S PALACE

From painting in oil by Carl Becker



Constructive architecture, though its proper place would have been in this collection, was grouped by the Exposition authorities with civil engineering and public works in the department of Liberal Arts. The designs and sketches displayed in the gallery alcoves of the Fine Arts building are in many styles and for many purposes, from a parish church to a card and billiard room, and from a mausoleum to a Turkish bath-house.

The Canadian exhibition contained in the anterooms of the British section, consists entirely of paintings in oil and water colors, the latter predominating, and both of excellent quality. "The Foreclosure of the Mortgage," by G. A. Reid, is one of the strongest and most interesting works. The scene is a Canadian farm house, to the owner of which, his features pallid and worn with long months of suffering, the sheriff is reading his doom. Looking at this picture one almost seems to hear the harsh, legal phrases as they fall from the mouth of the bluff official in inflexible and yet half-pitying tones. Upon the bowed head of his young wife and the inquiring faces of his children, one of them still in the cradle, the sick man's gaze is turned with a



THE FORECLOSURE OF THE MORTGAGE.

G. A. Reid.

tender but hopeless expression, and near by an elderly woman, bent with the infirmity of age, completes this sorrowful group. "The Visit of the Clockmaker," another of Reid's four canvases, represents a group of flaxen-haired children watching an old man engaged on the task which its title implies.

In landscapes there are several excellent studies both in oil and water colors, among the former, Brymner's "In County Cork," and "Border of the Forest, Fontainebleau," with others of lake scenery in the Rocky mountains, all of them strongly drawn and with sober coloring. By Ede, Jacobi, Watts, and others are also works of merit, and in water colors there are Fowler, Fraser, O'Brien, and Mathews, whose pictures are too numerous here to be mentioned. Herring fishing in the bay of Fundy is well depicted by Hammond, who has also "The Frazer River, Yale" and "The Great Illicilliwaet Glacier, Selkirks." Knowles has a truthful sketch of "Percé Fishermen, Gulf of St Lawrence." In portraiture some of the best canvases are by Robert Harris, E. W. Grier, Sarah B. Holden, and Mary A. Bell. A pleasing composition is Alexander's "Gathering Plums," where a young peasant girl is seated beneath a fruit-laden tree. "A Venetian Bather," by the late Paul Peel, is worthy of this well-known artist whose paintings of nude children are familiar, as reproductions, throughout the United States. Its subject is a slender dark-hued Italian girl, standing in front of a mirror and dangling a cord and tassel with which a kitten is playing. The lithe willowy figure of the little damsel is admirably modelled, and with luminous flesh-tones contrasting against a sombre background.

"The Founding of Maryland," by Henry Sandham, is one of the few historic themes, and follows closely

the historian's text. Leonard Calvert and his emigrants, under orders from Lord Baltimore, have landed at St Mary's in the early spring of 1634. The colors are flying and a salute of musketry is answered by the guns of a vessel anchored in the river, while a group of Indians gaze stolidly on the pageant, wondering what it means. Among the minor pictures there are many of excellent workmanship, as Brownwell's "Lamp Light" and Dyonnet's "Statuary," with their play of light and shade in carefully studied tones. The latter represents the interior of a statuary's workshop, and by J. M. F. Adams is a well executed painting of a studio where the soft hues of twilight are rendered with delicate touch. Worthy of note also are Forster's "Gossips," Challener's "Forty Winks on a Sunday Afternoon," and Morrice's "Early Morning Effect on the Conway," whose scene is the coast of Wales. The entire collection forms a most creditable display, and the more so that the public galleries refused to contribute of their treasures.

In Sydney, Melbourne, Adelaide, and elsewhere in the Australias are art galleries, both public and private, which would be no discredit to the art centres of Europe and America. Here are collections gathered by the ablest critics in the mother country, and by the Australians themselves, in whose homes will be found some of the choicest works displayed at international exhibitions. Local artists make a special study of the



THE FIVE SENSES. MAKART

scenery of their own country, in whose flora and fauna are opportunities for novel and striking effects. Not a few of their pictures have been hung in prominent places in Paris salons and in the Royal academy at London, where space is accorded only to artistic merit. Certain it is that the Australian contribution of more than 200 specimens from the National art gallery deserved better than to be relegated to an upper gallery alcove, where room was found for only a score of paintings, the remainder being displayed in Australia house. While this was due to a misunderstanding, it would seem that an area sufficient for the purpose might have been spared from the ample limits assigned to Great Britain and her colonies.

Of sculpture there is but a single piece, and that is a portrait bust in marble of Arthur Kenwick, commissioner for New South Wales, by the Italian artist Simonetti. Sydney with its picturesque harbor, as viewed from the North Shore, is an excellent sample of colonial art by C. H. Hunt, as also are Lister's "After the Shower" in oil and his New England landscapes in water colors. "The Upper Nepean," by Pignenit, is a well executed painting of river scenery, especially as to its color scheme, the steep rocky shore with its dense growth of primeval forest being brought into strong relief by light and cloud effects. Here is one of the most romantic of Australian landscapes, and of historic interest; for through the valley of this river the first exploring parties penetrated far into the densely wooded ranges of the Blue mountains, many of them never to return.



Glimpses of the Shoalhaven river are well portrayed in the water colors of Fullwood and Ashton, the former of whom has an oil painting of "The Station Boundary," a typical Australian scene, and the latter one of "The Prospector," taking for his theme a mining episode of the Pacific coast. Of other canvases mention will be made in connection with the national exhibit, where colonial art finds adequate expression.

The German exhibits, except for architectural models and designs, are included in the collective display of the German Art association, in which are represented all the branches included in the Fine Arts department. By critics the German galleries have been closely scanned, and to all classes of visitors are full of interest; for in art, as in music and poetry, the Fatherland looks back on a glorious past, and the works of its great masters belong not only to their own but to all civilized countries. Especially in plastic art has Germany exercised a powerful influence on other nations, and while herself adopting the best features of foreign schools, has treated them in independent lines, so that in the better class of works, whether those of ancient or modern masters, there is a strong individual character.

In the opening years of the present century we find both painters and sculptors in close communion with the antique, such artists as Thorwaldsen and Rauch, Overbeck and Cornelius inclining to classical compositions, at times in the severest of classic style. Of more modern schools, and especially in their canvases, naturalism is the pervading characteristic, and this, it must be admitted, has been carried to excess, even to the rejection of the ideal and beautiful, and the exaltation of the coarse and commonplace. Rather than be untrue to nature, they would reproduce nature in her most repulsive moods, though the effect be positively hideous. But of comparatively recent art there are many works in other vein, as in the visionary subjects of Gabriel Max with their richness of coloring, the genre paintings of Franz Defregger, and the historic depictions of Becker, Schrader, and Richter. So with Böcklin and Feuerbach, the former a student of the antique and the latter imparting a supernatural tone to his weird and fanciful landscapes, peopled with monsters and chimeras dire.

In architecture the German section is especially strong, fully representing the progress made in this direction since the unification of the empire. Of late the tendency has been to depart from the Hellenism characteristic of the earlier half of the century, in favor of the lighter style of the Italian renaissance, now widely adopted in state and monumental architecture. Of this there are evidences in the various museums and military schools, in the Imperial post-office and especially in the German Reichstag, recently completed in the most florid style of the renaissance. Even in business and private buildings this tendency may be traced, and as it would seem is destined to become universal, except in ecclesiastical architecture, where preference is given to the Gothic order.

Among the hundred or more pieces of statuary contained in the German section there are none to be preferred to Brutt's "Eve and Her Children," a contribution from the National gallery at Berlin. In a life size figure of marble the mother of the human race is represented with one of her babes nestling in her arms and the other clinging around her neck—the infancy of Cain and Abel. It is the personification of proud and contented matronhood, all unconscious of the tragedy which time would bring to her doors. "Rescued" is a large bronze group whose subject is a fisherman bearing in his arms an unconscious woman, her clothing torn from her shoulder and her hair a tangled clinging mass. Smaller works by this sculptor, and both in perfect pose, are his "Bathing Girl" and "Phryne," the latter flinging the drapery from her form and standing forth in all the bold insolence of tarnished womanhood.

Max Kruse has sent one of his most powerful studies, "The Messenger of Victory from Marathon," a youth running at full speed, one hand clutching at his heart, which soon will cease to beat, and in the other



THE FALCONER. MAKART

a laurel branch which proclaims the issue of the fight. Uphue's "Archer" is a bronze figure of an athlete standing with arms uplifted as he watches the arrow speeding from his bow. Another reproduction of athletic manhood is by Franz Stuck, its subject with every muscle brought into play, with head thrown back and heaving chest as he slowly raises a burden almost greater than he can bear. Klein's "Mortal Embrace" represents a man struggling with a lion, and Siemering has a heroic statue of "Victory," armor-clad and with dragon-mounted helmet. Sommer's "The Devil Takes to Himself Wings" represents his sable majesty with the pinions of a bat and with orthodox horns and hoofs, amusing himself by catching the flies that settle on his legs, over which the slow-creeping hand is extended.

Historic subjects are numerous, including portrait busts of Bismarck and Von Moltke, William I and William II, by Bruno Kruse, Franz Ochs, Begas, and others. Somewhat of a novelty in sculptural design is Max Klein's "Woman's Head," with brown hair and drapery around the white marble face and neck. Hilgers has two plaster reliefs of Christ healing the sick. Otto's "Vestal Maiden," a delicate conception, is a loan from the National gallery, as also is Eberlein's "Pulling out the Thorn." Riesch has several subjects, of which



SECTION OF THE DUTCH DEPARTMENT

his "Mignon" is most admired. Epier's "Gleaner" and Paul's "Binding on her Sandals" show the touch of a master hand; and among others worthy of mention are "Maison's "Negro Riding on a Mule" and Toberentz' "Resting Shepherd."

In more than 400 oil paintings, with a liberal display of aquarelles, engravings, and etchings, all branches of graphic art are represented. Many of the more ambitious works relating to historic and spectacular subjects are of unwieldy proportions, striving after effect and falling short in the achievement, wanting in clearness and finish, and above all in atmosphere, which is often muddy and opaque. Nevertheless there are many excellent compositions, displayed to good advantage as to grouping and light. To the majority of visitors they are somewhat of a novelty; for while French and Italian art were familiar to all, and Dutch and English art were not unknown, there are few who were acquainted with the works of German masters. Of special interest are the pictures of domestic life, their subjects treated not as studio models but as living realities, with nothing of the commonplace or conventional treatment elsewhere displayed in similar themes. Many of them differ but little from the style that prevailed in the opening decades of the century; the composition is almost identical; the figures, features, postures, and accessories almost the same; and here also is noticed the same conscientious painstaking and earnest seeking after truth.

Libermann, who holds high rank as a genre painter, sends two of his canvases, "Street in a Dutch Village" and "The Flax Barn," the latter a typical agricultural scene. Knaus has a spirited composition whose title is "The Duel Behind the Hedge." It is barely three feet square, but valued, as is said by the secretary of the German commissioner, at \$15,000. It tells its own story, the old story of schoolboys settling their



quarrel by a stand-up fight. Two of them are pommelling each other lustily, and around these central figures is a group of excited urchins watching the outcome and insisting on fair play. The facial expression is perfect, and so minute is the elaboration of detail that we wonder how such a wealth of meaning could be crowded into so little space. In Vautier's "At the Sick Bed" a young husband with pained and anxious look, is holding the hand of his wife, doubtful, as it seems, whether she will ever rise from her couch. Under a similar title Lessing paints a physician visiting a poor and friendless girl in her garret. "The Emigrant's Wife" and "Solitude," by Alberts, Andorff's "Village of Spessart," and Bachmann's "Wedding Morn" are all attractive studies. "Fishing in Norway," by Ekinas, or Eckenaes, tells its simple story in the neatest style of pictorial art. "Sabbath Rest," by Franz Defregger is well worthy of its title, as also is "Before the Dance," a Tyrolean scene, with youths and maidens clustered in the foreground awaiting the waltz music to be furnished by zither players stationed in the corner, while seated at table in picturesque attire the older folk are enjoying themselves with pipe and beer-mug. The damsels are fair enough to look upon, rosy and plump, but somewhat too baby-faced, one would think, for German tastes. "The Great and the Small" is a humorous sketch by Karl Röchling, where a soldier belonging to one of the line regiments is drinking from the canteen of a guardsman.

Portraiture is a strong feature in the German galleries, its strength consisting not in the number but in the theme and quality of the paintings. They are not overloaded as are other sections with mediocre and uninteresting subjects, but bring to life their most famous men in the canvases of their foremost artists. In



ALONE IN THE WORLD. ISRAELS

"The Berlin Congress," for instance, by Von Werner, a director of the Berlin academy, depicts one of the most important conferences of the age, the peace of Europe depending on its issues, while each of its members was or became a statesman or soldier of renown. But this is something more than portraiture, and in their proper sense portraits are not plentiful in the German section. Among the best of them are Lenbach's Bismarck and Leo XIII, both full of life and character, and with all the antithesis of feature and facial expression which the subject invites. Others are Heyser's picture of Joachim, the violinist, Hildebrand's "Queen Louise," Max' "Katharina Emerich," Knaus' "Helmholtz" and "Mommsen," Janssen's "Inspector Holthausen," and Smith's "Henrik Ibsen," the Norwegian poet, most of them contributions from the National gallery.

Religious themes are more numerous than might have been expected from a nation which inclines so strongly to skepticism. "The Shepherds Receive the Tidings," is a modernized version of the subject by Fritz Von Uhde, who like other German students of sacred history sees nothing supernatural in the episodes which he portrays. To them it appears that Christ is more needed to-day in the boulevards of Paris or Berlin than he was two thousand years ago in the streets of Jerusalem, and hence it is not inconsistent to portray in modern fashion the sublimated lesson of his life. The angel is a reality and not a phantom, a woman angel, and costumed with due regard to nineteenth century notions of propriety. Her features are noble, dignified, and almost beatific; but as she tells her story to a group of shepherds attired in homespun, it is evident that

her message, while received with reverence, is accepted only as relating to one who was born to be merely a man among men. "The Holy Evening," as the Germans call their Christmas eve makes no pretensions to Judean environment. The scene, which might be almost anywhere, represents a wintry landscape shrouded in twilight after a heavy fall of snow. A country girl, bare-headed and with shawl wrapped close around her, is leaning against a straggling fence, as she carries homeward her slender effects. It is a pleasing study, without any striving after sensationalism, but inferior in coloring to its sister painting, with its low, soft, restful tones, and its star setting amid the gray hues of morn. Among other religious subjects are Bracht's "Mount Sinai" and "Before the Walls of Jerusalem;" Grützner's "Cloister Kitchen" and "Monks at Supper," these in anything but religious mood; Papperitz' "Salome," Stockmeyer's "Peter Went Out and Wept Bitterly," and a study by Dettman, who takes for his text the passage from Genesis III in which the curse of labor, if curse it be, is inflicted on the human race.

Landscape, marine, and nautical themes are plentiful in the German section. Among the first are Baisch's "Spring Day in Bavaria," Kallmorgen's "Beginning of Spring," Malchen's "North German Landscape," Max Schmidt's "Landscape from the River Spree," and Berkemeier's "After the Shower." Normann, whose marine paintings are among the features of the Norwegian section, has here his "Summer Night" and "Narøfjord," the latter showing the coast of a fjord, its stony beach in the foreground, overcast with shadow, contrasting with the play of sunlight on the distant cliffs. Excellent coast scenes are Hamacher's "Breakers" and Böhme's "Outlook from the Lighthouse at Skomvaer." Schnars-Alquist, the German commissioner of Fine Arts, has a picture of the steamship "*City of Paris*" in a heavy sea, and takes as the scene of his "Narrow Escape" the British channel, where, in the dim and misty light of the young moon, a huge

steamer is bearing down on a tiny craft which flashes a light upon her as she crosses her bows. Karl Saltzmann has for his subject Emperor William II on board a whaler off the Norway coast. A harpoon has just been thrown from a mortar at a whale which is partly in sight, and the emperor is watching the effect of the shot. A high wind is blowing and the billows are rising rapidly, their height and volume expressed in hard but forcible tones. "A Hamburg Pilot," by Bohrdt, shows its subject rowed by a party of sailors toward a vessel which looms up between them and the horizon. In Schoenleber's "High Tide" fishing boats are lying in safety within a pier against which the waves are breaking angrily. "In the Lagoons of Venice" by this artist is an excellent study, and free from the luminosity of coloring that marks the conventional treatment of this well-worn subject. Hochhaus has a view of a navy yard where a corvette is under construction, and Hoecker shows a man-of-war with a group of sailors on the gun-deck, cleaning and polishing their rifles. "Rafting on the Isar" is by Karl Knabl, who has also a sketch entitled "In the Gray of Morning."



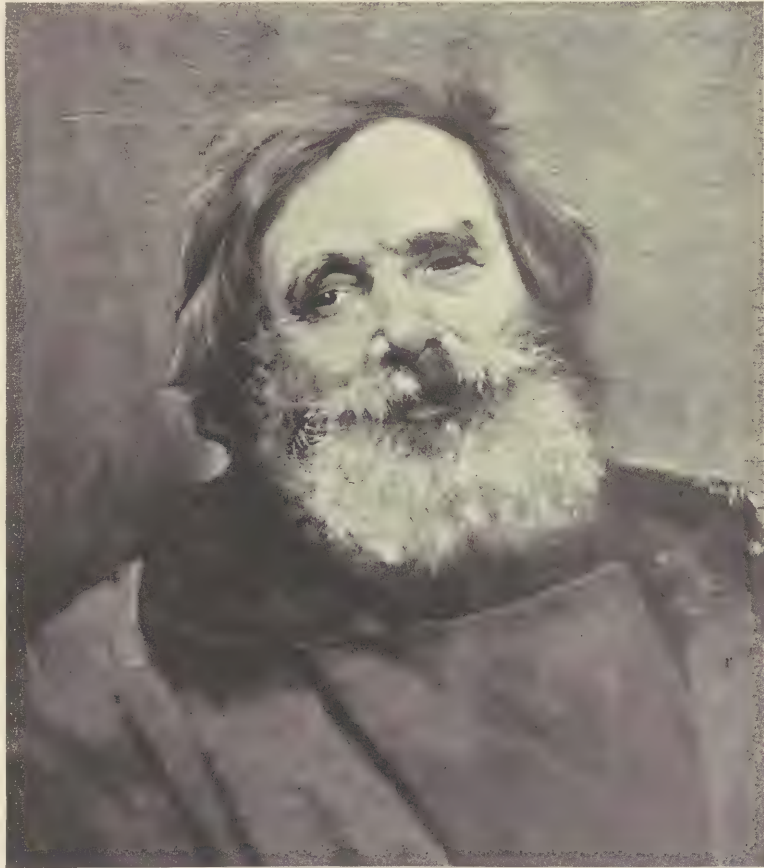
TYPE OF A FISHERMAN. ISRAELS



Painters of martial subjects love to depict the kaisers and their generals amid the peaceful pageantry of war. One of the largest pictures in the German galleries is Hans Schmidt's "Parade before the Emperor," his majesty appearing at the head of a Uhlan regiment, with the empress on horseback and an imposing array of mounted officers in handsome uniforms. On one side is the band of the white cuirassiers, and among the spectators are many famous captains. "The Disaster," by Brandt, shows a group of Russian cavalry defending themselves as best they can in a court-yard where they have taken refuge. Rosen has a well executed battle scene, that of Stoezek, where the Poles and Russians were unequally matched. Franz Adam's "Battle of Orleans" is little better than a panoramic painting, with ambitious design falling lamentably short in technique and execution. In better taste are Schuch's "Parade," Becker's "Vidette," and Boddien's "After the Battle." Rocholl's "Whom the Nurembergers Would Keep They Must Hang" is an interpretation on canvas of an ancient Nuremberg legend.

History and mythology find little expression in the German galleries. First among the latter may be mentioned Thumann's "Psyche;" but this is too well known in countless reproductions to require description. Becker's "Feast in the Doge's Palace," a National gallery painting, is a powerful and elaborate composition; but in the figures and faces of the women there is more of the German than the Venetian type. Hildebrand has a large and strongly drawn picture of Tullia attempting to drive her chariot over the body of her murdered father. Herterich's "Saint George," in full panoply and on gray charger mounted, places its subject in the midst of a forest at early dawn, half veiled in the rising mist. It is an over fanciful depiction of a commonplace personage who, as Gibbon relates, made his fortune at the expense of his honor by swindling the Roman authorities in a contract for provisions. Pietschmann's "Polyphemus Fishing" represents this mythical monster by the sea-shore, where he is capturing youths and maidens who shall presently furnish forth his repast. In contrast with his repulsive figure are the summer sky and landscape which surround him, redolent with the breath of flowers.

"The Rolling Mill," also a National gallery picture, is the only oil painting from Adolf Menzel, who with several others, as Dettmann, Hermann, Hertel, and Skarbina, appears to better advantage in the water color collection. In the latter Bartels has two excellent studies, whose themes are "Waves" and "Moonlight Night on the French Coast." In pen drawings Menzel is also prominent and there is a fair assortment of etchings and engravings. The architectural models and designs are mainly of church and public edifices, and include a large exhibit from the Imperial Ministry of public works.



STUDY OF A RUSSIAN PEASANT. VOS

The Austrian collection bears strong traces of the German school, but inclines more to history, mythology, and romance, in which a few valuable studies are interspersed among a large number of spectacular paintings. To the latter class belongs, for instance, Brozik's "Fenstersturz," showing how, at the city of Prague, a deputation of Bohemian protestants, whom the emperor's counsellors refused to treat with tolerance, settled the controversy by hurling them out of the window. In this incident of the Thirty Years' war are portrayed with ghastly realism the agony and terror of the doomed. A smaller and better picture is his "First Communion of the Hussites," where John Huss, the first martyr of the reformation, holds aloft a cup of consecrated wine, his followers kneeling around him, and in their features the ecstasy of faith and fervor which ere long would lead them to the stake.

"Never Retreat," a contribution from the emperor, is by Julius Von Payer, who takes for his subject an episode in the Arctic expedition of 1872-4, of which he was one of the commanders. It is painted, as only it could be painted, by one who has taken part in the scene which he describes. The men are on the verge of

starvation and in mutinous temper; but to turn back is certain death; and as they listen to the inspiring words of their leader, they resolve to share his fate. The story is told as no words could tell it, so that one seems to be an actual spectator of this incident of twenty years ago, with the central figure standing erect and fearless among his dispirited followers. In "The Story of the Hero," where a soldier returned from the wars is relating his adventures, Munkaczy does not appear at his best, and this is the only canvas from an artist whose pictures occupied an entire wall at a recent Paris exhibition. In "Christ and the Women," by Goltz, and in Schmid's "Suffer Little Children to Come Unto Me," the topics are treated in the modernized fashion, which appeals more to the understanding than to the heart.

Landscapes are few in the Austrian galleries, and of such as there are the scenery is fanciful rather than real. Among the best are Simm's "Indian Summer" and those by Eugen Jettel, whose "Ramsau Scenery" is a loan from the gallery of Prince Liechtenstein. Even the sea is idealized by Austrian painters, and its waters and shores made the medium of expression for mythological or imaginary themes. In Knuepfer's "Fight of Tritons" two mermen are contesting for the ownership of a mermaid, who is seated on a jutting ledge of rock, placidly awaiting the issue of the combat. In his "Eternal Siren," the sea only is painted, as the siren whose voice is never stilled. Both pictures are among the best marine studies in this section, the former being a loan from

the academy of fine arts at Vienna. In Wertheimer's "Vision" a fair goddess of the deep stretches out her arms toward a sailor, who is leaning over the side of his boat. Intensely realistic are the tortured frame and features of Hirschl's "Prometheus," with vultures tearing at his vitals and ocean nymphs swimming around him as though in mockery. A more pleasing study by this artist is his "Wedding Procession" at Pompeii. "Morning on the Shore," and others are by Florian Wiesinger, one of the foremost of Austria's women painters.

There are some excellent figure paintings in the collection, first among which may be mentioned "The Five Senses," a panel picture by Hans Makart. The forms are nude and beautifully modelled, with the purity of expression which a true artist can give to nature unadorned. Sight is personified by a comely maiden who is looking at herself in a mirror; hearing by one with head inclined in the attitude of a listener; feeling by a mother with a babe on her shoulder; tasting, by a woman in whose hands is the forbidden fruit; and smelling, by one whose face is hidden in a spray of blossoms. In "The Falconer," by this artist, its subject appears to be gazing on the spectator with eyes as piercing as those of the bird which is perched on her hand. In "The Master of the



IN THE GARDEN. KEVER

Hounds," by Hans Canon, a huntsman is standing in a richly furnished interior, with the dogs leaping around him eager for the chase. "God Bless You," by Franz Defregger, also represented in the German section, is a drinking scene, with men making merry over their tankards and girls looking on with roguish aspect. His "Children Playing with a Dog" shows a little girl caressing her pet, with bare-footed urchins standing by. These, with Blaas' "The Good Brother," where a sturdy little lad is peeling an orange for his sister, are excellent depictions of every-day life among the poor. "Gypsy at the Hearth" is the best of Pettenkofen's canvases. "Adventures in the Lottery," a loan from the emperor, is by Joseph Gisela, who has other valuable



works on exhibition. Of miscellaneous themes there are Leopold Müller's "Market Place in Cairo," Thoren's "A Wolf!" and Schindler's "Saw-mill in Oberweissenbach," the two first academy paintings and the last the property of the emperor, as also are among others Bacher's "Mater Dolorosa," Huber's "Fighting Cows," and Moll's "Roman Ruins in Schoenbrunn."

Among the best of the portraiture are Huber's "George Washington," and Angeli's pictures of Stanley the explorer and of the architect Schmidt, the latter an academy painting. Hans Temple's sketches include one of William Unger. In the etchings and engravings are reproduced by Michalek the features of Haydn and Beethoven, and by Unger those of Rembrandt and the sons of Rubens. In statuary Tilgner has a zinc bust of the emperor; Breneck, a bronze relief of Wagner; Weigl, bronze statuettes of Mozart and Beethoven, these with a handful of minor works completing the collection.

In the Belgian galleries is a partial reflex of the French collections, and to describe them in detail would be merely to repeat much of what has already been said. But they are not merely a reflex; for here are many works in original vein and of unquestionable merit, showing that the spirit of the Flemish masters still lives in the country of the Van Eycks, of Rubens and Quintin Matsys. The selection was made with the utmost care, only the best canvases of the best artists finding favor with the jury appointed by the Belgian government.

In statuary there are several works from Paul de Vigne, who takes for his subjects classical and mediæval characters. Des Enfans' statuettes "After the Walk" and "La Nique" are in excellent taste, as also is his marble bust of Manon Lescant. Van Beurden's "Forced Bath" and "Quintin Matsys in Boyhood" are skilfully modelled, the former in *cire perdue*. Van der Straeten's bronzes of the seasons, from the Yerkes collection, and his marble bust of Worth are of excellent workmanship, as also are the bronzes of De Tombay and the statuettes of Albert Hambresin, the latter portraying fifteenth century impersonations. By Charlier, Le Roy, Joris, Willelms and others are treated a variety of topics ranging from the innocence of childhood to the ferocity of a polar bear.

More than a hundred oil paintings and less than a score of water colors are contained in the Belgian section, covering the same ground as in other galleries, though somewhat weak in portraiture and still life subjects. In landscapes "Snow Effect" and "Avenue of Oaks," the scene of which is in the neighborhood of Antwerp, are by François Lamorinière, to whom was awarded the great diploma at the International Exposition in Berlin. "The Storm" and "Setting Sun at Sea," by Adrien Le Mayeur, are the most powerful of the marine paintings. Farasyn's "Embarkation of Emigrants at Antwerp" and Jan Verhas' "The Martyrs of the Beach" and "The Walk on the Dyke at Heist-sur-Mer" are works of decided merit. In a panel of portraits Jean Van Beers reproduces the features of Henri Rochefort, Ada Rehan as Lady Teazle, and Mrs Brown Potter as the Lady of Lyons. Of "Charles VI and Odette" it need only be said that it is from the brush of Albrecht De Vriendt. "Last Days of Pompeii" and "Episode of an Inundation, Dardrecht" are ably depicted by Ernest Slingeneyer, and among other canvases worthy of note are "The Holy Week in Seville," by the late Nicaise De Keyser, and "The Will of Christopher Columbus," by Pierre Joseph Verhaert. "Fruit," by Berthe Art, is the only work that the pastellists have to show; but of engravings, etchings, and drawings there is a fair collection, including studies after Van Eyck, Rubens, and Donatello.



A COOK. VAN DER MAAREL

The Dutch and, as I have said, the British galleries, but especially the Dutch, are among the few sections where performance has exceeded anticipation. Much was of course expected from the land of Rembrandt and Teniers, of Terburg, Ruysdael, and Paul Potter, and here, at least, there were none who turned away with a sense of disappointment. Rather did they linger among these masterpieces, returning again and again

for a further realization of their manifold excellencies. If in the French, Italian, and perhaps in the United States galleries there may be more that appeals to our sense of the beautiful, we shall nowhere find more striking landscape and pastoral effects, more vigorous depiction of storm and sea, more life-like genre and figure paintings, whether of man or beast, more skilful blending of light and shade, more perfect symphony of coloring. Here is especially noticed the faculty of reproducing form in masses, and yet with a minuteness and accuracy of detail which is one of the first principles of art, while not appearing on the surface except in the general effect. In this and other qualities the Dutch collection stands in the front of contemporary schools of painting.

In nothing perhaps does the Dutch artist appear to better advantage than in his descriptions of home life, the life of a people where the arts of domesticity have received their highest development. None know better how to give to home a homelike charm, how to invest the rude life of peasantry and fishermen with tenderness of sentiment, with the simplicity and earnestness which belong to the nature as to the art of the Hollander. Here also pathos is depicted, often with infinite depth of feeling, suggested rather than expressed in subdued but masterly tones. Take, for instance, Israels' masterpiece, "Alone in the World." At a first



SURPRISED. BOKS

glance the casual observer might see nothing in this famous picture but an aged and sorrow-stricken man seated near the bedside of his dead wife. But looking deeper, he will find in this small and dimly lighted chamber a wonderful intensity of expression. The man is gazing, not at the body but away from it, gazing with the mute and hopeless stare of one who is wounded almost unto death; so that we wonder whether he will ever rise from his seat, and if so, whither he will betake him, now that he has lost the one object which made life worth the living. There are none to comfort him, and there is no palliation of his misery, nor anything that suggests it. The furniture is of the plainest; on the table stand a pitcher and glass; but there is nothing else that shows how the last suffering hours of the lifeless woman were alleviated. In no picture that we call to mind has its title been more fully expressed. It is the incarnation of woe, and in all the realm of art we shall search in vain for a more pathetic subject. In other of Israels' canvases, and especially in his "Fisherwomen at Zandvoort," where a group of women are awaiting their husbands' return from a perilous trip, is displayed his power of suggestion amid seeming poverty of detail. Here also and in his "Summer Day on the Shore" is shown how spacious a landscape can be fashioned under his brush, and how perfect in low strong tones of coloring. "Type of a Fisherman" is a perfect type of its kind, and typical also of Israels' style of portraiture.



A powerful death-bed scene is depicted by Hubert Vos, but not with the touch of an Israels; nor are the works of this painter, though of unquestionable merit, in the true style of Dutch art, of which for the most part they have only a trace. In his "Pauvres Gens," the scene is a peasant's cottage, where the father of a family lies dead. His wife is kneeling at his side in the first agony of grief, and at the foot of the bed sits the aged father, his head bowed in prayer. Near by stands a little child, gazing sorrowfully around the chamber of death and wondering what it means. At the opposite side a young girl is holding an infant in her arms, and another child is looking on with dazed and terrified expression. From a small window comes a dim green light, its tone in keeping with this abode of sorrow. "A Room in a Brussels Almshouse" is the work for which Vos received his first gold medal at a Paris exhibition. To depict a number of old women seated at a table or standing in groups is not an agreeable theme; but the subject is treated for all it is worth. In "The Angelus on the Zuyder Zee" there is more of the Dutch flavor than in any of his paintings here



IN DANGER. MESDAG

exhibited. Again the central figure is an old woman, who is seated in a capacious chair, none too large for her portly form, and on hearing the sound of the bell looks upward in prayer from the pan of potatoes which she is peeling in her lap. At her side a little boy turns from his play with bended knee, and a young girl with beautiful features stands in reverent attitude. It is a homelike study, with quaintness of environment, and yet with much tenderness of sentiment. Other works by this artist are "A Breton Interior," "Study of a Russian Peasant," and a full length portrait of Wilhelmina, the infant queen of Holland, attired in mourning, and standing in a marble hall with roses scattered at her feet. Still another delineator of cottagers and their affairs is Albert Neuhuys, among whose canvases are some beautiful idyls, especially in his "Sunlight," where a wealth of sentiment is thrown around the simple figures of a baby and a goat. "In the Garden," by Kever and "A Cook," by Maarel are simple and pleasing compositions. "Surprised," by Boks, shows a party of servants, feasting at their master's expense, suddenly disturbed by his reappearance, attended by a ferocious bull-dog.

What Jozef Israels is as a figure painter, that is Hendrik William Mesdag as a painter of the sea. In all his works is shown a careful scrutiny of nature; and we know not whether most to admire his truthful interpretation of the troubled waters, or his splendid domelike skies, with low horizon line and massive cloud effect, swept by fierce northern gales. Nowhere is ocean's storm more powerfully portrayed than in his favorite canvas, the title of which is "In Danger." The wind is blowing dead ashore, and beneath a dark lowering sky,



MILLS NEAR ROTTERDAM. ROELOFS



IN THE DOCKS OF AMSTERDAM. JANSEN



on a sea almost as dark, a vessel is battling with the fury of the tempest. It is a striking composition, treated with a master's touch, though less pleasing than the more placid scenes which he knows so well how to paint. In his "Summer Morning at Scheveningen," a combination of landscape and marine, fishermen are moving toward their boats over a sea-beach glistening in the morning sun, with background of sand-dunes dotted here and there with tufts of verdure. In "Ready to Sail Out" the boats have been pushed to the edge of the waves, with sails unfurled, and a moment later will be speeding on their way. Both scenes are full of vitality, and in both are accurate versions of the life of fisher folk. J. H. L. de Haas, though one of the foremost of marine painters, is represented only by animal studies, in one of which is also a landscape effect. In the United States, where for half a century has been his home, he is best known by his graphic depiction of "Farragut's Fleet Passing New Orleans." War is not a favorite subject among Dutch artists, and is here represented only by a few minor works, among the best of which are Papendrecht's "Artillery Review at Utrecht."

Of all the pictures in Holland's galleries, there are none more essentially Dutch than those of Jakob Maris, who like Constable has never gone far afield for his subjects, but finds them almost at his door. A noted



CANAL AT ROTTERDAM. MARIS

character is Jakob, with all an artist's eccentricity, and except for his brother William, the only one here represented of a great family of painters. Says one of his brethren of the craft, "Maris will sit for half a day on the bank of a canal. Then he will go to his studio and paint for a month—not what he has seen but what he thinks." Among his five oil paintings in this section, with one in the loan collection elsewhere described, his "Canal at Rotterdam" is a finished study; but "The Two Mills" shows to better advantage his vigor and naturalness of style. There is no elaboration of foreground, and no striving after external effect; he enters at once on the subject, the central feature of which is merely a couple of windmills with the ubiquitous Dutch canal. The richer tones of the painting are reserved for its cloud effects, with dense gray masses rolling up from the Zuyder Zee, illumined with sunbeams which almost pierce the veil, suggesting but not revealing a blue expanse of sky beyond. Beautiful indeed is the play of light and shade, and perfect the harmony of coloring. A similar theme is chosen in the "Scene in Amsterdam," one of Wysmuller's canvases, but less skillfully treated. Roelofs' "Mills near Rotterdam" are the quaintest of old-fashioned windmills surrounded with a landscape that is unmistakably Dutch. A more finished study is the "Mill at Abcoude," by this artist, a landscape painter whose works are freely displayed in the Amsterdam museum. So with Gabriel, who paints



LANDSCAPE WITH CATTLE J. H. L. DE HAAS



PLOUGHING THE FIELDS, MAUVE





SUMMER EVENING. DE BOCK



THE FALL OF THE RIVER VECHT. BASTERT

with equal facility windmills, harvest fields, and scenes from village life. Ten Cate's blithe and bright hued sketches, hardly to be dignified with the name of landscapes, have been seen and admired in scores of art galleries. Of late he has studied much in England, and has here two pictures of the Thames at low and high tide.



FISHING FOR SHRIMPS AT SCHEVENINGEN. BLOMMERS

"Winter" is a finely executed study by Meulen, who has also on exhibition "A Sandy Road" and "At the River Side." De Bock's "Summer Evening" is perhaps the best of his three contributions. Blommers' "Fishing for Shrimps at Scheveningen" is a neat and pleasing picture. Apol's "Thaw on the River Yssel" depicts in faithful colors the dreariest of wintry scenes. Jansen's "In the Docks" shows a huge steamer lying in one of the busy waterways of Amsterdam.

Within recent years Holland has lost three of her masters, each of whom excelled in his line; Mauve, as a painter of animal figures and landscape sketches, Bosboom, whose forte was ecclesiastical

architecture, especially church interiors, and Artz, who knew well how to interpret the simple story of peasant life. But all of them live in their works, and are well represented in the Dutch collection. Of Mauve's four subjects, apart from the one in the loan collection, "Ploughing the Fields" is rich in color effect, while "Cows Going Home" are painted as only he can paint them; "Pasture Near the Dunes" is a pleasing landscape study. Artz was a pupil of Israels; and though not in the foremost rank, shows a keen insight into nature's secrets, his canvases telling their homely tale and appealing more to the sympathies than to the imagination, yet with sufficient firmness of touch. In Bosboom's studies the integrity of the architectural scheme is skilfully transcribed, and the lighting portrayed with masterly hand. Among others represented in the collection of oil paintings are Karl Klinkenberg, who has also two studies in water colors; Bakhuyzen, a landscape and animal painter; the genre artists, Gerke Henkes and Bastert, whose crisp and brightly colored sketches find many patrons. From the latter is "The Fall of the River Vecht," an excellent specimen of his light and facile method.

A feature in the Dutch section is the number of contributions from women, all of them chosen solely on the ground of merit; for no favor was shown by the jury of selection; nor was there aught



THAW ON THE RIVER YSSEL. APOL





WINTER

From painting in oil by F. P. ter Meulen

of sentiment. "They were better than many of the male contributors," says the commissioner, "and were taken only for that reason." By Madame Mesdag van Houten, wife of the marine painter, and by Miss Abrahams are excellent studies in still life and miniature landscape. Marie Bilders van Bosse reproduces "One of Nature's Secluded Nooks," for which her brush is famous. Marguerite Rosenboom's "Garlands of Roses" are painted to perfection, and Henriette Ronner, whose specialty is in animal figures, has three of her compositions. Therèse



SWEET HOME. ISRAELS

The Dutch section is one of the few in which the water colors are not inferior to the paintings in oil, with the same truth and power of conception and execution, and with the effect as well sustained. Among their artists oils and water colors are interchangeable mediums of expression, the best qualities of the one being repeated in the other, with similar themes and modes of treatment, and without confusion or repetition. To describe the collection in detail would be merely to reiterate what has already been said; for many of the contributors appear to equal advantage in both departments. Take, for instance, Israels' "Motherly Cares" and contrast this with his "Sweet Home," the former a water color and the latter an oil painting; there are seen in both the same vigor and simplicity of technique, the same wealth of suggested meaning. Compare these again with "Alone in the World," with "Fisherwomen at Zandvoort," and with others of his works in the Dutch galleries and the loan collection; we find in all the unmistakable touch of the great master, one who is perfectly at home in the lighter as in the more powerful method of depiction. In addition to Israels there are Mesdag, Maris, and Hubert Vos, De Haas, Ten Cate, and others, while as to women there are all who have been mentioned as among the leading painters in oil. In etchings the best of the original works are by Storm van Gravesande and De Zwart, with reproductions by Zilcken and Miss Van Houten.

Schwartz has life-like portraits of herself and her mother; but a more ambitious work by this artist is "The Orphan Girls at Amsterdam." A group of young women attired in red and black, with white caps and kerchiefs, is gathered around a piano, one of them playing and the others singing a hymn, some with bowed heads, some with eyes uplifted, and all in reverential attitude. Many of the faces are exceedingly beautiful, and in this simple, touching theme is a wonderful depth of expression—the sadness of bereavement, and yet with trustfulness and love depicted in these comely features which tell no tale of fear.



THE ORPHAN GIRLS AT AMSTERDAM. SCHWARTZE





CHURCH INTERIOR

From water color by J. Bosboom

In Denmark's section the best of Danish art is represented, and here, as in the Swedish and Norwegian collections, is unmistakable evidence of force and originality, too often marred by heaviness of coloring, and with much room for improvement in modelling and draughtsmanship. But subjects are rich and plentiful, most of them showing strong virility of treatment, and if some of the compositions are hard and stiff, they are never weak and seldom commonplace. Nevertheless, we could wish that in these galleries were less of the glow of northern skies, and of the sombre hues of northern forest and foliage.

In statuary may first be mentioned Stephen Sinding's plaster cast of "A Captive Mother," a daring but not a repulsive theme, showing the nude figure of a woman, her hands bound behind her back, stooping forward to suckle her babe. More pleasing studies in the nude are Dan's "Snake Charmer" and Bandgaard's "Will o' the Wisp," personified by a young lad holding aloft his lantern and beckoning onward with mischievous smile. Kroyer's portrait busts of the poets, Kjelland and Drachmann, of the painter, Michael Ancher, of Svendsen, the violinist, and Schjoedte, the zoölogist, are in the best style of this celebrated master, one of the few who have achieved distinction both in plastic and graphic art, winning his first salon honors in 1881 and in 1888 receiving the legion of honor. Lady Macbeth in the sleep scene is well delineated by Saabye; but a more popular work is his "Susanna Before the Elders," a somewhat daring and sensuous study, but almost perfect in pose and outline. Pacht has a bronze statue of Christian IX, and there are other compositions in which is noticed a suppleness of modelling and simplicity of design, without undue striving after effect, except perhaps for Hasselries' "Christ and Columbus," a design for a historic monument, representing the latter as a New World evangelist.

Lauritz Tuxen's large painting of the royal family, with life-sized portraits of the king and queen and their two and thirty children and grandchildren, is noticeable rather for its subject and superficial area than as a work of art. A much better work is his "Susanne in the Bath," where, in the silvery sheen of moonlight breaking through the faint rose tints of a twilight sky, a shrinking woman, draped only in her long golden hair, confronts her gray-bearded accusers. Kroyer has but a single portrait, that of a comely damsel in pink satin gown, and appears to better advantage in a small garden scene, with figures of his wife and mother-in-law seated in the shade and surrounded with brightly colored verdure and foliage. Holten's portraits of a lady and of the painter, L. A. Ring, represented in the Danish section, are in excellent taste, as also are those of Bertha Wegmann, especially as to costuming, showing that this artist knows how to give dignity to a figure in plain stuff gown, without blaze of jewelry or shimmer of satins and silks. A pleasing study is Achen's "Morten," a coachman in full livery, with round and rubicund features suggestive of good living and self-content. Hans Brasen has neatly transcribed on canvas Andersen's story of "The Woman with the Eggs." Julius Paulsen's "Portrait of Professor Froelich" reproduces with singular fidelity the features of this veteran artist, from whom are two of his scriptural and mythological paintings. "The Models are Waiting" is a somewhat commonplace depiction of three very commonplace women, partially disrobed and altogether wearied. A fine combination of figure and landscape painting is Braendekilde's "Worn Out," showing, amid a wide expanse of furrowed glebe, an aged man on his way from store or market, his packages slipped from his grasp, for the strength has departed from him. At his side is a peasant girl, his daughter probably, kneeling and crying for help. Johansen's "Christmas Eve" is full of tender sympathy and with skilful treatment of interior light. By the same artist are "Autumn Landscape" and "Sunday at Tibirke Church."



SUSANNA BEFORE THE ELDERS. STATUE BY A. W. SAABYE



Landscape and marine subjects, sketches of farm and woodland, animals and browsing herds form the bulk of the Danish collection, with few mythological, genre, or still-life studies. "Autumn" is the only contribution from Thorvald Niss, one of the foremost of Denmark's artists, than whom none know better how to reveal the hidden beauties of northern forests and rivers. It is a subdued and profoundly restful scene, well worthy of a man who has been honored at the international exhibitions of Paris, London, and Vienna. Skovgaard the elder, also a noted painter of woodland scenery, is not represented; but from his son is a well executed picture of a Swedish forest on a windy autumn day, with russet vista of foliage and murky atmosphere in which "trees with aged arms are warring." By the same artist is a weird and elfish fantasy entitled "The Goblins' Forest." Paulsen, in his "View of a Plain of Denmark," has a miniature study of the flat country, varied only by a fringe of trees and the shadows of passing clouds. In this quiet and diminutive painting,



WORN OUT. BRAENDEKILDE. DENMARK

so small as almost to be overlooked, the suggestion of distance and depth is conveyed with remarkable condensation of space. Another unpretentious canvas is Elise Konstantin-Hansen's "An Oat Field," with a flaxen-haired lad in the foreground, his head just rising above the grain as he watches a bird swooping down on his left. Worthy of note also are Bikvist's "The Weather Clearing After the Rain" and Mols' "Rainy Weather" and "October Day."

In marine and fishing scenes the Danish section is especially strong. Carl Locher's "November Night on the North Sea" shows the moon shining upon troubled waters, through which a steamer is ploughing its way, with skilfully suggested movement of the laboring vessel, the drifting clouds, and threatening waves. His "Glacier of Oefjelds" is a bold and skilfully colored reproduction of Icelandic scenery. "Gale on the West Coast of Jutland" is a small but finely executed canvas by Oscar Matthieson, whose animal painting, presently to be described, is one of the treasures of the Danish collection. "A Storm Brewing," by Hans Dall, is one of the best of its class, as also is his evening landscape scene, both on the coast of Zealand. Still another storm is portrayed in Carstensen's picture of a sailing ship lurching heavily as she runs before the sea. In contrast with these is La Cour's "View of the Sea on a Calm Spring Day," with jutting headlands in the shore line, ocean and sky meeting on the gray horizon, and all enshrouded in mist, save where the green-tinted waves are rippling toward the pebbly beach. In Viggo Pedersen's canvases, one of them a marine sunset, are almost the

only traces of impressionism, which finds little favor among Danish artists, Thorolf Pedersen, in his "Tempest," has a boat riding at anchor inside a breakwater, against which the waves are dashing angrily. "Shipwrecked Sailors on the Sea" is a powerful but gruesome composition by Rasmussen, who also exhibits his "Summer Night on the Coast of Iceland." The former represents a boat drifting aimlessly amid tropic waters under a tropic sky, its sail hanging against the mast and the helmsman neglecting his rudder. A sailor is supporting a dying woman, and another lies dead in the boat, his hand hanging limp over the side. Overhead sea-birds are screaming, and the waters are alive with sharks, whose fins appear above the surface, one of them turning to seize its prey—the hand of the lifeless sailor.

In fishing scenes there are none to be preferred to Ancher's "Fishermen Returning Home." As a figure painter, especially of fisher folk, he has few superiors, his plastic modelling, bold delineation, and symphony of coloring showing a perfect mastery of his art. In his "Winter Day at the Village Shopkeeper's" is a group of weather-beaten tars in oil-skins and tarpaulins, their faces tanned with exposure and deep potations of rum.



THE JEWS IN THE DESERT. JERNDORFF

Matthiesen's "Cart Horses by the Seine" is a powerful animal painting, one of the horses being in angry controversy with the driver, while the other listens with knowing look. But here is something more than an animal painting, reproducing, as it does, the atmosphere of Paris, with its long vista of bridges and reaches of river in admirable perspective. The entire work would appear to be an acknowledgment of the artist's obligations to the capital of art, where his training was largely received. Therkildsen's "Frightened Horses" is also an excellent picture, especially in suggestion of movement. Otto Haslund's "Interior of a Stable," in which are the heads of cows, shows vigor of delineation.

Of historic paintings the one best worthy of note is Matthiesen's "Giffenfeldt as a Prisoner at Munkholm," describing how this worthy minister and chief-justice of Denmark, unjustly accused of treason, devoted to the teaching of children the weary years of his incarceration. Two willing pupils are at his side, and through the deep shadow cast athwart the dungeon walls comes a streak of yellow light from its barred and narrow casement, illumining the sad worn features of the unfortunate statesman. In mythology, Helsted's "The Judgment of Paris" is but a commonplace representation of this well-worn theme, one that would appear to have been selected merely as an excuse for a depiction of the nude. The three goddesses have little of beauty or grace of form; nor does it appear why they should be standing naked in an open field before a youth whose



only resemblance to the son of Priam is his pointed Phrygian cap. "The Deluge," by Jerndorff, is a realistic, if not an attractive composition, with conventional treatment adhering to the scriptural story, the groundwork filled with writhing figures of swarthy complexion, above which appears the offended deity in dark blue mantle, enthroned amid the clouds. As the antithesis to this subject is "The Jews in the Wilderness," with its army of thirsting Israelites gasping under a broiling sun, while far in the distance the leader smites the rock whence flow the living waters.

Scandinavian art as represented at the Fair is almost a revelation to the majority of visitors, most of whom for the first time compared with those of other nationalities the works of Swedish and Norwegian masters. As in the Danish galleries, there are many paintings original in conception and with abundant vitality of treatment, too often overbalanced by faulty coloring and want of taste. While inclining to impressionism there is also a strong individual tone, and especially in landscapes and other out-door scenes. Such works are never shallow, and if harsh in composition, bear evidences of a healthy and progressive movement. Here, as in the Dutch section, genre paintings are among the best on exposition; but these we must judge from the Scandinavian point of view; from life as it is among this simple, home-loving people. Next to these perhaps are marine pictures, those at least contained in Norway's galleries; for of the men of Norway a large proportion almost live upon the sea, and especially are their legends rich in stories of the fjords and of the main.

To Anders L. Zorn, the Swedish commissioner of Fine Arts, is conceded a foremost rank among his brethren of the craft. His training was received almost entirely at the Swedish academy at Stockholm, though he has lived much in Paris and closely studied French methods, especially those of Monet. In the salons his works are familiar as those of a clever and versatile artist, one perfectly at home in genre, landscape, portraiture, and all other subjects to which he turns his brush, treating them with masterly touch and strong virility of style, though somewhat opaque as to coloring. While his subjects are seldom new or serious, his delineation is strikingly original, giving even to the commonplace the wealth of expression characteristic of his more ambitious themes. In his "Omnibus," for instance, the crowded interior with its typical work-a-day passengers is depicted with startling realism. And so with his "Ball," with its whirling figures, representing only a higher stratum of the commonplace. The work is full of animation, with crispness of outline giving emphasis to the expression of feature and form, and yet with due restraint. At its side were placed his "Forest Study" and "Sunset." The former represents an undraped figure which might be that of a nymph or a spirit of the woods, but that she appears to have



THE OMNIBUS. ZORN

lost her way and stands bewildered among the luxuriant forest growth. The form is well modelled, after its kind, and is brought into strong relief by the play of sunbeams glancing through interlacing branches; but it is altogether too sensuous for a symbolic theme; so that we wonder what the young woman is doing there, posing for the nude amid classic woodland groves.

The same remark applies in a measure to his "Sunset" and "Summer," in the former of which the figure is absolutely repulsive, marring the effect of what would else be a pleasing and artistic composition; for the sunlit waters of the fjord are painted with a master's touch. Zorn appears to better advantage when he

drapes his figures, as is seen in his "Margrit" and other of his works. The "Fair in Mora," a transcript from Swedish life, gives full expression to his power of observation and of placing on canvas that which he observes. The fair is over, and farmers in their rough country vehicles are setting their faces homeward. Off the roadside lies a man in a drunken stupor, and seated near him in the foreground is his patient sorrowing wife.

Among Bruno Liljefors' studies of animal life, his "Hawks' Nest" and "Foxes" show remarkable vigor of execution, with technical qualities not to be found in other schools. The nest is on the branch of a tree in the foreground, and at its edge the parent bird, superbly painted, with arched neck and gleaming yellow eyes, is holding a rabbit before his little ones, as they rise with eager cry and bills wide open, each intent on securing its share of the feast. The other is a woodland scene; and beautiful indeed is the effect, with the gray light silvering the aged trunks of trees, around which are fallen leaves suggestive of autumn tide. Over the top rail of a fence a fox is springing in pursuit of his prey, and another is crouching beneath, their dun-red fur and stealthy supple figures rendered with excellent effect. "Return of the Wild Geese" is a fine combination of bird and landscape painting, these harbingers of spring arriving while the snow still lingers on the ground amid the chill colorless light of this hyperborean clime. "A Swedish Fairy Tale," by Carl Larsson, is somewhat of



THE BALL. ZORN

the Jack-the-giant-killer type, showing "the boy who killed the ogre, married the princess, and was rewarded with half the kingdom," in leather apron and cap, with sword across his shoulder. The princess is a quaint little damsel, with a crown on her braided hair and the ogre's head in her lap. "Ulf in the Sunset" is a fanciful sketch by the same artist, who has also a finely executed portrait painting of the members of his family.

Landscapes and sketches are abundant, and among them are works by Prince Eugen, one representing a sunny glimpse of scenery and another a gaudy kiosk in a setting of many-colored tints. Near by Hasselberg has a bronze bust of the prince, the third son of the king of Sweden. While some of the compositions are marked by impressionism of an aggravated type, it is for the most part rather the artist's impression,



modifying what would else appear to him an over accurate transcription of nature. This may be noticed, for instance, in Nordström's "The Yellow House," half concealed amid the glowing sunlight by the straggling branches of trees; and in his night scene, where is a white steamboat gliding past silent homes, its lights faintly revealing the placid motion of the waters. Nils Kreuger has some pleasing subjects, especially the "Winter Idyll," with mist-wreathed ships amid a dappled, slow-heaving sea. Portraiture, genre, and other themes are fairly represented, and there are small collections of water colors, engravings, etchings, and drawings.

In sculpture, one of the gems of the Swedish galleries is Hasselberg's plaster statue of "The Snowdrop," in which the idea is symbolized in a form of virginal innocence, undraped, but pure as the flower whose name

it bears. The arms are raised as though to support the drooping head; the lips slightly parted, and the closed eyelids tremulously uplifted toward the sunlight, the entire theme suggesting the motion of a snowflake, and its loss of identity as it nears the drift toward which it is falling. Eriksson's "Carl von Linné," in plaster relief, represents the great naturalist looking at a fresh-plucked flower, and in a niche above, a figure about to crown him with a wreath. The attitude is graceful, and the benign, intellectual features of Linnæus are reproduced with singular truthfulness of expression. This work, it may here be said, was purchased for presentation to the Chicago Art institute. Börjesson's bronze group of "The Brothers" represents two naked boys, the elder, with bat and ball, standing erect above the other with an air of manly self-confidence, and the younger, with bow and arrow, leaning against him as though for protection. It is a simple subject, but striking in its simplicity, and almost classic in dignity of treatment.

Norway has but a small group of statuary, in which are represented only four of her sculptors, of whom two are women. In landscape and marine subjects this section is especially strong, and though some of them are stiff and with too much intensity of coloring, they are nearer to life than would appear to the casual observer; for in this "land of

the midnight sun," with its brief summer season, nature depicts with lavish hand her rich but sombre hues, and in these dark fir forests are none of the lighter tints of our own woodland glades. "From Rondane" is the most finished of the group of landscapes displayed by Otto Sinding, one of a well-known family of artists, his sister, Johanna, having two plaster casts in the Norwegian galleries, and his brother, Stephen, one of the finest paintings in the Danish collection. "The Glacier" and "A Misty Morning" are also excellent compositions, the latter showing a herd of cattle on a hillside, over which the mist is slowly creeping. "Wreckers" is a realistic and finely executed painting, with its angry waves breaking against a rock-bound coast, and brave men



A FOREST STUDY. ZORN



LOS NAUFRAGOS

From group in plaster by Gandarias y Plaügan





SUMMER. ZORN

the former also portrayed in a bust by Skei-brok. "Bathing Boys" is a lively sketch by Hans Heyerdahl, among whose paintings is a large variety of themes. In his "Oui ou Non" are the figures of a young man and maiden walking along a country road, the former having put the momentous question and eagerly awaiting the response. It is the old subject, old but ever new, and here treated in a style far above the usual mediocrity of these depicted episodes. That the girl is about to say "yes" is evident to all but the bashful youth at her side. She is holding him well in hand, for she is an experienced coquette, and there are no signs of yielding in those mischievous, blue-gray, northern eyes. So at least it appears to her lover, whose perturbation is admirably portrayed. Mythological and fairy legends are well represented, the latter especially by Gerhard Munthe, in whose compositions is a strong element of the grotesque. There is "The Wicked Stepmother" turning her daughters into trees, with their little brother wailing at their side. Cinderella is here, and the wise bird that talked to the king, with the princes who were turned into bears and as bears remained faithful to their mistresses. And so with a long category of fairy tales, all of which are

risking life and limb as they drag ashore the bodies and whatever else is left from the wreck. In lighter vein is "From Lofoden," with its summer sea and miraculous draught of fishes. Here, as I have said is one of the most prolific of fishing-grounds, the daily catch being telegraphed all over the kingdom, as in the United States is recorded the visible supply of grain.

By Adelsten Normann the same subject is partially treated, with the midnight sun playing on the waters, a yellow sky, and a shore of brown and gray. "North Wind," by this artist, is a graphic delineation of the romantic scenery of the Norwegian coast. Another "Midsummer Night" is by Gustav Wentzel, with figures standing at a garden gate, and in the background the sheen of foliage illumined by golden hues. "Leif Eriksson Discovers America," by Christian Krohg, is full of life and motion, and in the main well worthy of its subject. Little of the vessel is shown, and that little is almost identical with the *Viking*, as she lay off Jackson park, herself a reproduction of the craft unearthed by a sailor in 1879, near the port of Sandefjord. As she speeds through the troubled waters, the waves dashing over her, Eriksson stands surrounded by his crew, with one hand on the tiller and the other pointing shoreward to the rock-bound coast.

Among the strongest works in portraiture are Petersen's likeness of Alexander Kielland, Gude's Henrik Ibsen, and Werenskiold's Bjornstjerne Bjornson and his mother,



MARGRIT. ZORN

treated with quaint and fanciful touch. In other vein is his "Evening in Eggedal," a romantic and yet restful landscape study.

Arbo's "Uolkyrie" is a powerful conception, showing the daughter of Woden speeding earthward to clasp in her arms a warrior slain on the battle-field. To bear to heaven the spirits of the brave was the special mission of the Valkyria, and here is a goddess divinely fair, her golden tresses streaming in the wind as she guides her fire-breathing steed adown the clouds. One of the most attractive paintings in this section is Skredsvig's "The Son of Man," a localized version of the subject, but one treated with respect, and with none of the repulsive features observed in Jean Beraud's "The Descent from the Cross" in the French galleries. Nevertheless the theme is sufficiently modernized. Attired in national garb, Christ is entering a Norwegian village, far in the Kjölen mountains. It is eventide, and the people are thronging around him with tokens of welcome, bringing their sick to be made whole. In the centre stands the nineteenth century messiah, a young man with reddish beard and shabby workman's attire, one hand rested, as though in blessing, on the head of



FAIR IN MORA. ZORN

a little child and the other holding a hat much the worse for wear. In the foreground are the minister and two of the village functionaries, discussing, as it seems, his right to preach, as did the Pharisees of old. To the orthodox this interpretation of the Saviour in common laborer's dress, instead of flowing robes, may be somewhat of a shock; but after all it was in the costume of his day that Christ was depicted by the earlier masters, and in the expression both of features and figure is no want of reverential treatment.

To say of a collection of paintings that it is marred by excess of strength may appear somewhat of a paradox; yet if the truth be told, this is what must be said of the Russian paintings, another fault in which is their phenomenal dimensions, so that looking for the first time on these mammoth canvases, we are thankful the exhibit is a small one, for a few such would have exhausted the entire space at the disposal of the management. The best feature in the collection, most of which is from the Imperial academy, is that it deals largely with national subjects, and if only it dealt with them in a true artistic spirit would form a most interesting and valuable collection. From a Russian point of view it is doubtless of excellent quality; but art is universal, and works of art cannot be judged by the tenets and methods of a single school. In this superabundance of energy, too often accompanied with faulty modelling and coloring, there is the intention rather than the embodiment of art. The principal merit lies in the truthful telling of the story, the absolute and unflinching realism which transcribes on canvas the living subject or the impression which the painter has





NORTH WIND. NORMANN

formed of it. With the intense vitality of treatment natural to one of his perfervid imagination, the Russian artist strives mainly after brilliant effects and cares little for more delicate shades of expression. Nor is there anything of the suggested meaning to be read in the works of the great masters. But to these remarks there are not a few exceptions, as will be noted in some of the pictures selected for review.

One of the strongest paintings and an excellent illustration of the striking realism of the Russian school, is "The Cossack's Answer," by Repine, a contribution from the galleries of the

tzar. The scene is a Cossack encampment, where the leader of a savage horde is preparing his reply to a demand for their immediate surrender. It is a defiant answer that he is making, as appears from the swart-visaged soldiery standing around with shouts of approval and boisterous, derisive mockery. The figures are skilfully grouped and not over-colored; their rude garb carefully detailed, and the facial expression perfect of its kind. On one after another of these coarse and brutal features, varied yet similar in type, the eye rests with a sense of unwilling fascination, but turns away without regret. It is a repulsive subject; but it is a masterpiece.



LEIF ERIKSSON DISCOVERS AMERICA. KROHG

One of the most famous of Russian paintings, and one of the largest is Siemiradsky's "Phryne," another contribution from the czar. But though with strong virility of conception and execution, it is rather a spectacular than an artistic composition, with lavishness, not to say garishness of coloring. Life-like and natural are these figures in their eastern drapery, especially those which are grouped in the middle and foreground against a deep blue sea and sky, their gaze fixed upon the courtesan, who appears on a sunlit terrace, partially disrobed before a garlanded shrine, in personation of Venus. But there is hardly a trace of the poetic treatment which the subject invites; merely a theme elaborated with patient, conscientious labor and research, stiff in sentiment and overwrought as to expression. That Siemiradsky can do better than this must be inferred from his high repute as an artist; but he has not done so in his "Christ in the House of Lazarus." Here also the personages are well delineated, with play of light and shade on the vine-clad arbor under which the carpenter's son is seated, while in the distance sunlit clouds canopy the cypress groves and the darkening hills. The eyes of the

Christ are bent on Mary's enraptured face, as she sits at his feet, listening eagerly to his words, while Martha regards her sister with impatient gaze. But the rapture is somewhat feebly portrayed, as also is the divinity of aspect in the central figure. This may be a fair interpretation of Slavic art; but it is not art in its higher sense.

Among historic paintings one of the best is Kivschenko's "Military Council at Fili in 1812." It is the eve of the battle of the Moskva; Napoleon has arrived in sight of the capital, and Prince Kutusof and other Russian generals here portrayed are carefully laying their plans; but on the morrow will find themselves no match for the great captain. "The Escape of Gregory Otrepieff," as described by Miasoiedoff, is full of life and



BATHING BOYS. HEYERDAHL

action, showing how this pretender to the throne, arrested while travelling in disguise, saved himself by leaping out of an open window, after stabbing one of his captors. A similar theme is Peroff's "Pugatchoff, the Personator of Peter III," with a group of cringing figures around his throne, while others look on in doubt. Worthy of note are Novoskolzeff's "Last Minutes of the Metropolitan Philip," Tchistiakoff's "Grand Duchess Sophia Vitofftovna," and Bronnikoff's "Christian Martyr," where Roman mercenaries are feasting and making sport of the victim, who kneels in prayer at their side. A well told story on canvas is Willewalde's "You To-day and I To-morrow," where a soldier is pointing a gun at the heart of his wounded steed, as though about to end his sufferings.

Columbian themes are represented in the Russian section by Aivazovsky, from whose fertile brush are nearly a score of paintings, most of them marines and none of them very remarkable, except for luminosity of hue. In one of the pictures Columbus is surrounded by his mutinous crew, the *Santa Maria* rolling heavily in a foam-flecked emerald sea, a color which ocean never wears when lashed by storm. Its best expression



is in the massing of the waves, their sweep and curve, their force and impact, tossed by the winds and uplifted by the swell into mountainous crests.

Landscapes are not numerous, and among them there are none more true to nature than Endoguroff's "Early Spring" and "Heavy Rain," the latter almost painful in its realism, the subject merely a river flowing through a wide and level plain on which the flood-gates of heaven are unloosed. "The New Moon" and "A July Morning" by Kratchkovsky are faithful sketches, and Golumsky's "Mushroom Gatherers Taking a Rest" is a life-like combination of sunny landscape and peasant figures.

In portraiture and figure painting one of the strongest conceptions is Sedoff's "Vasilisa Melentievna," where Ivan the Terrible is gazing with an expression of tenderness and regret on the sleeping form of his mistress. From Kramskoy there are two academy paintings, and a pleasing sketch by Litovschenko is that of

the Italian ambassador, Calvuci, drawing the favorite falcons of the czar. Of Constantin Makovsky's subjects the most ambitious is "The Bride's Attire," where a young woman is preparing or rather being prepared for her wedding. The long dark braid of hair is being parted and closely bound to the head as befits a matron, and around her stand the friends of the family, full of harmless gossip and garrulity. "A Bacchanal" by the same artist is one of the few mythologic themes in the Russian section, with Dionysus as the central figure amid a group of nymphs and satyrs. In his "Romeo and Juliet," though fairly executed, the figures are stiff and wooden, and it is at best but a sickly love-making.

Scattered among the more pretentious works are pictures of home and everyday life, in pleasing contrast with the highly wrought and sensuous paintings which surround them. Never has motherly love been more truly expressed than in Ivan Pelevin's "The First Born." It is a woman of the people; but love knows no distinctions of class or condition, and these homely features are almost radiant with beauty, filling the room with light as she looks down on the babe in her arms.

In Trovoshnikoff's "Grand-



EVENING IN EGGEDAL. MUNTHE

mother and Granddaughter," where an aged woman is trudging through the snow, with a young girl slightly in advance, there is also a vein of pathos which has won the hearts of many admirers. Even more strongly does Zagorsky appeal to our sympathies in his "Broken Heart," where a daughter turns to her mother for comfort as she reveals her tale of sorrow. In "He Loves Me—He Loves Me Not," Shuravieff tells the story of a maiden testing the faithfulness of her lover by counting the petals of a daisy as a nun might count the beads on her rosary. Neatly also has he portrayed "The Family of a Street Musician" and "Haymakers at Rest." Under the title of "Easter Hallowe'en" Pimonenko shows two young maidens with eager, hopeful faces, watching for a signal from the unseen which shall convince them of the fidelity of their sweethearts. Vladimir Makovsky's "Public Market in Moscow," while not an inviting study is an accurate reproduction of its subject. Kivshenko's "Assorting Feathers," though a small canvas, is a large picture, with remarkable condensation of space, the rich purple tones not over-colored but adding rather to its attractive qualities. Bodarevsky's "Wedding in



THE COSSACKS' ANSWER, REPINE

Little Russia" represents a group of peasants in a marriage procession paying their respects to the landlord of the estate, and in other sketches there are well drawn figures of country folk.

A noticeable feature is the air of sadness depicted in scenes of Russian life, even in those which portray its more cheerful phases. Thus in "Sunday in a Village," by Dmitrieff-Orenbursky, where peasants are trying to make merry, we can see that they are only trying, and with indifferent success. Even in scenes of revelry, it is a coarse and brutal revelry that is expressed, one sad to look upon, with its uncouth attitudes and bloated features. Such are Jacoby's "Ice Palace," where is a glimpse of the old time festivities of the Russian court,



ASSORTING FEATHERS, KIVSCHENKO





PHRYNE

From painting in oil by Léonide



and some where gross dissipation is more strongly portrayed. Of other repulsive aspects of Russian life a few illustrations will suffice. In one of Kuznezoff's paintings "The Justice of the Peace" is seated in his droschky, conversing with an officer, and gazing sternly at a group of abject peasantry, standing with uncovered heads as



THE BRIDE'S ATTIRE. MAKOVSKY

they await the decision which may turn them out of house and home. "The Tzar's Bounty" is being distributed, as Klodt Von Jurgensburg portrays it, among a number of prisoners, some cringing on their knees and others with feet in the stocks as they receive their scanty dole of bread. Bobroff in his "Erzkus Herzke—A Jew from Kovna," seems to concentrate all the craft and misery of the race in these greedy, cunning, distressful features. "The Narva Roads," by Mestchersky, is a powerful tale of misery, and so with other subjects, where the morbid and gloomy tones of Russian life and Russian art are all too faithfully depicted.

A few water colors and a couple of carvings complete the Russian collection, except for its statuary, of which there are less than a score of pieces with only four exhibitors. Gunzburg has several statuettes, with a bust of Leo Tolstoi, a plaster group

of "The Bathing Boys," and a clever study of "The First Music" represented in the figure of a boy. Beklemischeff sends his "Runaway Slave," for which he received a gold medal at an Italian exhibition, and there are pleasing compositions by Maria Dillon, whose subjects are "Bliss" and "Caprice," the latter personified by an angry child who has thrown her doll on the floor and is about to hurl her slipper after it. In connection with Russian art may be mentioned the exhibit of the Society of Polish Artists, which is deserving of better treatment than it received at the hands of the management, scattered as it is among the galleries, alcoves, and stairways of the Art building. Zmurko, its most celebrated painter, has six of his canvases on view, all showing his facile and effective method of treatment, but raw and opaque in coloring, as for the most part are the rest of his school. "A Lady in Fur" is one of his best, the clear sharp outlines showing to excellent advantage his light and nimble touch. So also where he depicts a beautiful woman and a handsome youth under the influence of hasheesh, their faces radiant with beatific visions. "Mephistopheles' Serenade" is one of the best of the six canvases exhibited by Maszynski. Malczewski's "Death of an Exiled Woman in Siberia" is a powerful study, but overloaded with pigments. A better color scheme is noticed in Kedzierski's picture of "A Rustic Astronomer," where a youth sits with eyes upturned toward the crescent moon. Ryszkiewicz' "Cossacks" is a clever composition, with mounted scouts descending a hillside toward a broad valley partially enveloped in shadow. Popiel's "After the Storm" shows a field of levelled grain, with the owner and his wife gazing ruefully on the scene of desolation.

Of all the galleries in the palace of Fine Arts few were examined with greater interest or closer scrutiny than those of Japan, a nation of artists in their way, no less than the French, especially in carvings, tapestry, and feather work, with their marvellous elaboration of design. The collection was



ROMEO AND JULIET. MAKOVSKY





THE BATHING BOYS. GROUP IN PLASTER BY GUNZBURG

with surrounding structures, approached by terraced groves from which is a long array of massive steps. There are more than 1,000 figures in the procession, all executed with wonderful precision, especially as to their masks and vestments, and with oriental richness of coloring. Of most finished workmanship are the embroideries designed as wall-hangings, screens, and panels, with figures of landscape scenery, festival processions, flowers, birds, and animals.

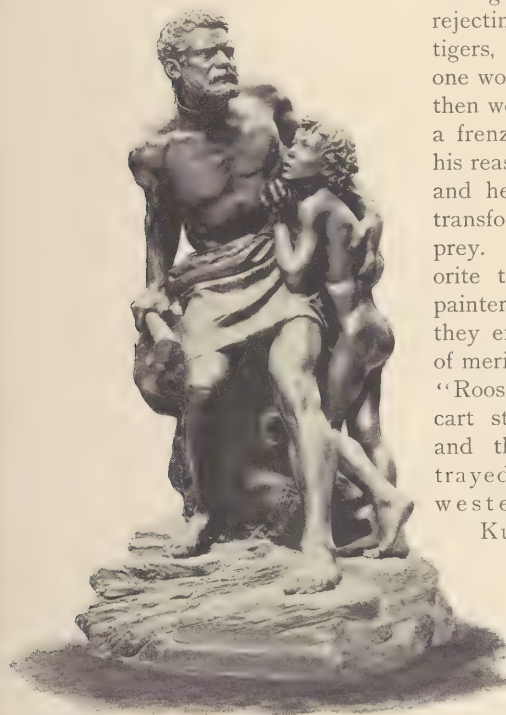
Chikdô Kishi, a Kiotô artist of renown, takes for one of his subjects a duel between a kite and a crow, with another bird looking on in placid indifference. The scene is portrayed in graphic tones, as also is the wintry chill of the atmosphere which surrounds it. His "Tiger" is also an excellent study, especially from a country where there are

no tigers, Kishi, it is said, rejecting four pictures of tigers, before he could find one worthy of his brush, and then working at it with such a frenzy of inspiration that his reason became unsettled, and he imagined himself transformed into a beast of prey. Animal life is a favorite theme with Japanese painters and one in which they excel. Among others of merit is Seitei Watanabe's "Roosters on a Cart," the cart standing in the snow and the figures well portrayed, at least to our western fancy. Beisen

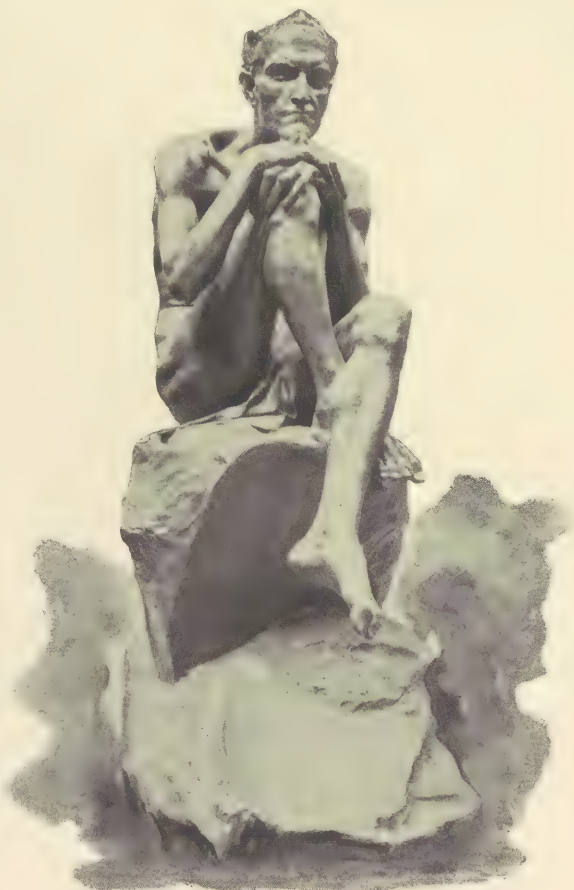
Kubota, who received a gold medal at the Paris Exposition of 1889, has a finely executed picture of eagles catching a rabbit. In Keinen Imao's "Monkey

installed with a view to secure the best effect, and with little attempt at classification, the brilliant drapery of red and white around a star-shaped centre contrasting strangely with the sombre tones of Holland's adjacent section. The entrance-way is guarded on one side by a large bronze eagle, with thousands of feathers engraved with many thousands of lines, and on the other by a protecting deity or warrior who might be a Japanese St George. It is hung with a tapestry of silk chrysanthemums, beyond which is a bas-relief of dragons in clouds, and a huge gorilla carved in cherry-wood. In the vestibule is a model of the temple of Yasaka in Kiotô, one-sixtieth of the actual size and a most delicate piece of workmanship. Near it is the goddess of mercy, whose name is Kwannon, carved in ivory, richly bejewelled, and with lotus in hand. Before passing through the portières may also be noticed a picture of a group of carp. It is by Nogchi Yukok, one of the foremost painters of the flowery land.

Entering the chambers, which are filled but not crowded with treasures, we find among the tapestries a wall hanging of a Nikko festival procession from a Kiotô artist, Jimbee Kawashima by name. In its 260 feet of superficial area there is not a vacant inch of space, and here is represented the two years' task of scores of weavers, toiling in relays by night and day without a moment's intermission. The scene is a temple



A RUNAWAY SLAVE. PLASTER GROUP BY BEKLEMISCHEFF



MEPHISTOPHELES' SERENADE. MASZYNSKI





CHRIST IN THE HOUSE OF LAZARUS

From painting in oil by Ljermiradsky



Running from an Eagle," the fright of the monkey is admirably depicted, as from an overhanging branch he has fallen gibbering to the ground, paralyzed with terror.

With human figures the Japanese are less successful, and especially in battle scenes, where their warriors are anything but warlike, though scowling at each other with a malignity of expression that is suggestive of a long sojourn in the lowest of the lower regions. The gaudy trappings of their steeds are far more conspicuous than the horses themselves, which are often tangled in a bunch and overweighted by their mail-clad riders, every link and thread of their armor being reproduced with wearisome fidelity of detail. Shinsai Ikeda takes for his theme the battle of Kawanakajima, which was fought in the province of Sinano, far back in the days when the daimiōs held divided sway with the mikado. In another canvas is depicted the overthrow of a vast insurgent



ENTRANCE TO JAPANESE DEPARTMENT

himself in further token of his loyalty. In a third is described the prowess of Maeda Inuchiyo, the Samson of the Japanese, who lived, as the legend has it, for 300 years. One of the best of the figure paintings is Gyoksho Kawabata's "Toy Seller," where a group of children is gathered around a tiny counter laden with playthings, while the itinerant merchant, benign of aspect, is playing his flute to entice their custom. Among the best of the landscape scenes are those which depict the mist-veiled summit of the sacred mountain Fuji-san. Gahō Hashimoto has also a pleasing "Landscape in Misty Morning," and there are others of unquestionable merit.

From the workshop of the late Hayashi Tadamasa, of Tokio, is a collection of 100 pieces of solid color porcelains, representing the latest results of his ten years' toil and numberless experiments in the hope of reviving one of the lost arts of China and Japan. They were prepared especially for the Exposition, and the effort cost him his life; for he died from physical prostration a few weeks after the last of his specimens were completed. Kōzan Miyagawa has, in the older style of porcelains, a yellow vase with dark colored flowers, and another wave-patterned and with figures of dragons under the glaze. Of priceless value is the celadon vase, adorned with delicate plum blossoms by Yohei Seifu, who also displays a white vase decorated with peonies. From Shirozayemon Suzuki come the three largest pieces of cloisonné enamel work that have ever been fashioned. Two of them are vases, and the third an incense-burner, the former nearly nine feet high, designed for exhibition, and costing more than two years of labor. Their figures of birds and animals are symbolic of the seasons and the virtues, and are also of national significance; the dragon typifying China; the

eagles, Russia; the group of chickens, the Corean islands; and the rising sun, the empire of Japan. On the top are red and white stripes inlaid with silver stars, with chrysanthemums and other floral devices emblematic of the friendship existing between Japan and the United States.

The sculptures and carvings are strong features in the Japanese sections. In Suzuki's bronze group of falcons and Otake's bronze rooster, perched on a hollow stump, with a hen and chickens below, the feathers are wonderfully wrought, especially in the rooster's sweeping tail. Among the wood carvings is Takamra's baboon, clutching in rage the feathers of a bird that has escaped him. Another is Takenouchi's "Chinese Buddhist Sage," whose dignified and reposeful attitude are in strong contrast with Yamada's "Wrestler," with his strained muscles and coarse brutal features. In lacquer work there are boxes, tables, and writing cases such as only the Japanese can make, most of them beautifully decorated. Worthy of note also are the tablets inlaid and engraved with metals in a style peculiar to the Japanese. A plaque representing a flock of herons among the reeds is from the hand of Natsuo Kanô, an acknowledged master of this branch of art.

Thus the west joins hands with the east in this exhibition of art from all the nations, its contributions gathered from every country where art has made its home; westward from St Petersburg to San Francisco, and southward from the land of the midnight sun to the regions which lie beneath the southern cross. By those who have compared the Japanese collections with such as were displayed at Paris in 1889, and at Philadelphia, it is admitted that in none of the schools are there stronger evidences of improvement. In the higher branches of art Japan bids fair to compete with more cultured communities, as even now she does in its application to many purposes of common utility; for nowhere is the artistic faculty more strongly developed or more earnestly cultivated.

WORLD'S FAIR MISCELLANY.—In the Art galleries there are in all 10,040 exhibits, of which 1,093 are sculptures, medallions, carvings, etc.; 4,647 are paintings in oil and 951 are water colors, with 1,141 engravings and etchings, 717 drawings and pastels, 186 decorative art works, and 802 architectural subjects; these including minor classifications, as carvings and paintings on ivory, enamel, and porcelain. The United States has 3,034 specimens; France, 1,200; Great Britain, 1,105; Germany, 881; Italy, 540; Spain, 411; Holland, 332; Austria, 166, and Russia, 133. More than 2,000 artists from nearly all civilized nations in the world were represented in the exhibition; and that the number was not still larger was due merely to want of space. With rare exceptions the space applied for was largely reduced, though in the final allotment foreign applicants were most liberally treated. Thus to France were awarded 33,400 square feet, or within some 1,200 feet of the area set apart for the United States. Germany and Great Britain received each more than 20,000 feet; Italy and Belgium each more than 12,000; Austria, 11,500; Holland, 9,300, and Russia, 7,700. The picture line was 30 inches from the floor, the works being arranged up to 15 feet above it except in a few of the smaller galleries.

The reproduction of historic bronzes in the Italian section was made by one of the most expert workers in bronze, under the personal supervision of the director of the national museum at Naples. These are said to be the first copies taken from the originals, and are so skilfully executed that, as I have said, they can hardly be detected as counterfeits. On account of their artistic and educational value they were classified in this department, other reproductions in metal being relegated to the Manufacturers' division. The collection was sold at the St Louis museum of fine arts.

As to Holland's choice exhibition the following remarks may be of interest. They are from Hubert Vos, a court painter, acting commissioner of Fine Arts, and himself well represented in this section: "From the land of Rembrandt," he says, "has been sent a most complete and representative collection of Dutch art. The artists of Holland have the reputation of being the greatest colorists in the world, while the French are perhaps the greatest draughtsmen. After a decay of fifty years Holland has been enjoying for ten or fifteen years past an epoch of unequalled splendor and magnificence in her art, and one of the peculiar features of the exhibit here will be that each picture will tell its own complete story—a story of Holland's meadows or its wind-mills, its canals or quaint old towns and cities on the Zuyder Zee. Others will tell of the simple, honest rustic and the lives of the soldiers, while still others will show the great sea, the greatest of

Holland's enemies. Little care the painters of Holland about archæology or past historical events or the restoration of something dramatic or theatrical. They do not seek their inspiration from books or the stage. They tell with unequalled depth and emotion the sometimes sad and sometimes gay but always peaceful story of Holland life. It is somewhat curious, but nevertheless a fact, that seventy of the seventy-five painters who exhibit in the Holland art section have reputations extending all over Europe, and the works of at least twenty-five are to be found in all the great galleries. Such names as Mesdag, the three Maris brothers, Neuhuys, Henkes, Gabriel, Roelofs, De Haas, De Bock, and De Zwart are known to painters the world over, while the name of Jozef Israëls is a veneration and an inspiration. His famous picture, "Alone in the World," has been lent, along with many other great works, from the Mesdag collection. And, by the way, the Mesdag private collection is one of the greatest in the world, being valued at something more than \$1,000,000."

It has been regretted that Switzerland is not represented in the Art galleries. A choice section was offered for the purpose but refused, and further action was postponed until all the space had been awarded. For Henneberg and sons' panorama of the Bernese Alps, executed by several artists, a medal was awarded; but though properly belonging to the department of Fine Arts, the panorama was displayed in the Midway plaisance, and hence will be noticed in that connection.

As to the artistic value of the Japanese collection the following are in substance the remarks of an artist who inspected the exhibit at Tokio, before it was shipped to Chicago: "There can be little doubt that in their display of weaving tapestries, embroideries, and the like, the Japanese contributions will win the most unqualified praise. It is difficult to decide whether the higher award of praise should be given to textile products or to decorative metal work. Feminine eulogy will doubtless be lavished on the marvels in silks and velvets; but the achievements of workers in metal will attract a closer study from critical observers. Among the various methods that which takes the foremost rank is known as Kala-Kiri-Bori, and has the peculiarity that, while no part of the design stands in relief, the lines are cut in varying depth and thickness, so as to produce effects in light and shade conveying similar impressions in their way to those of drawings by pencil or brush. Of this the best specimen is by Natsuo, a veteran artist and the acknowledged leader of his school. The reputation of Japan for lacquer work will be largely enhanced by this superb exhibition, which contains so many beautiful objects that the eye is bewildered in seeking to fix the order of precedence."





## CHAPTER THE TWENTY-SECOND

### STATE EXHIBITS

**I**N the preceding chapters I have traced the history of fairs, beginning with the days of Solomon, when the fair had already become a prominent factor in the commerce of the east; then turning to the subject proper of my work, I have presented in outline the origin, site, construction, and general aspect of the Columbian Exposition, followed by a detailed description of each of its principal divisions. But yet there remain to be described its accessory departments, its state and foreign exhibits, its Midway plaisance, its congresses, incidents, and results, all subjects full of interest, and to many the most attractive features in the entire display.

To 39 states and territories and to 19 foreign powers, with due regard to geographic grouping, a liberal space was allotted, skirting on both sides the north lagoon and the palace of Fine Arts, and thence extending toward the northern limit of Jackson park. By home and foreign participants was appropriated, as we have seen, more than \$10,000,000 in all, and of this a liberal proportion was devoted to the erection of separate buildings for the display of certain classes of exhibits, and also for use as official headquarters, as club-houses and resting places, where visitors from each state and country could meet their friends and neighbors, for

whom otherwise they might search in vain among the millions who made the pilgrimage of the Fair. In the larger buildings are assembly halls and in each one appliances for personal comfort and convenience. Here registers are kept,

mails delivered, information afforded, and as convenient rendezvous for men and women are reception rooms, some of them decorated in the highest style of art and furnished in antique or colonial fashion.



In many instances the history of the state is represented, as in the building itself, in relics and symbolic statuary, and in the portraits of eminent men. Thus Florida's edifice is a reproduction of Fort Marion and Virginia's of Washington's Mount Vernon home, while, as I have said, California's structure recalls the mission days of her pastoral era. Others again represent the special industries of the state, with a view to climatic conditions, or embody its prevailing style of architecture, its local taste in decorative scheme. While some of the smaller buildings were intended chiefly for official and social purposes, not a few contain elaborate exhibits, especially of raw material; for, under the rules of classification, manufactures and their processes were excluded, nor could such exhibits compete for prizes or awards. Thus they are partially a reduplication or in the nature of a supplement to the state collections in the Agricultural and other main departments of the Fair, illustrative of primary resources and industries, together with historic and archæologic features.

In describing the state exhibits and buildings they will here be presented in sections, and rather with a view to geographical position than in relation to quality and size. But it is not my purpose to describe in



BIRD'S-EYE VIEW, LOOKING TOWARD THE NORTHWEST

elaborate detail all these two-score structures and their contents, the former varying from a classic temple to a frontier block-house, and the latter from a pot of honey or a jar of pickles to a masterpiece of art. To the general exhibits of the Fair each state and territory contributed of its best, and of their several collections sufficient mention has been made. But in its own home each one also gave expression to certain features which, if displayed in the larger edifices, would have been out of place, and these, together with such as relate to special industries and resources, I propose to pass in review.

Commencing then with the middle states, let us place ourselves in front of the New York building, whose palatial design, resembling that of an Italian villa of the renaissance, appears to excellent advantage in a choice location facing the palace of Fine Arts. It is a three-story, rectangular structure, and though coated with staff, is solidly built and well adapted to its purpose, covering, apart from porticos and terrace, an area of 14,500 square feet. The principal entrance is approached by a spacious flight of stairs, in imitation marble and walled with granite, on which are casts of the Barberini lions and pedestal lamps, the former taken at Rome and the latter reproductions from the museum at Naples. In niches on either side of the doorway are





MAIN FRONT OF THE NEW YORK STATE BUILDING



PRINCIPAL ENTRANCE, SHOWING BARBERINI LIONS

fountains. An elevator runs from the basement beneath the main floor to the top of the building, on the roof of which is a garden with palms and flowering shrubs, arbors and awnings, resembling somewhat the roof-gardens of the Casino and Madison square.

But to the second floor the usual method of approach is by the grand stairway, with its four flights each of some forty steps, and with decorations in Pompeian red and gold. Thence through large, double doorways there is access to the main reception or banqueting hall, 84 feet long by 46 in width and 45 in height. This is the main apartment of the New York mansion, and here was largely concentrated its decorative scheme. The principal colors used are white and gold, and as to architecture the dominant note is the Corinthian, its roof supported by pillars with Corinthian caps, entwined with wreaths and festoons of fruit and flowers, above them panel pictures, and elsewhere an allegorical painting by Millet. On one side is a balcony with speakers' and orchestral stand, adjoining which are boxes for invited guests. To the west of the hall is the board-room of the lady managers, and on the east the office of the general manager, with a museum of relics and documents pertaining to the history of state and nation.

Of the exhibits of the empire state in the main divisions of the Fair, frequent mention has been made in the preceding chapters of this work. They include, as we have seen, elaborate collections in the departments of Manufactures and Liberal Arts. In the Agricultural, Horticultural, Forestry, and Dairy buildings, and in the Live-stock pavilion, New York appeared to excellent advantage, especially in her display of flowers and fruits, of cattle and farm products. In the Mining section was an exhaustive collection of her mineral and geological specimens. To the Ethnological bureau she contributed much that was of interest, and in the palace of Fine Arts no portion of the union was so largely represented. Excellent work was accomplished by the state board of women managers, especially in the organization of its crèche and training school for nurses, its model kitchen and cooking school, and its contributions to the woman's library, furnished and decorated by the board. This, it may here be said, is the only state board in which the colored races were recognized, one of the members collecting valuable data as to the work of colored women.

But we are now concerned with the exhibits contained in the home of New York at Jackson park, one of the most elegant, and in proportion to size the most costly of all the Exposition structures. Apart from the building itself, with its handsome furniture and its rich and tasteful decorative features, the principal attraction is in the museum chamber, where is a valuable collection from an historic point of view, relating largely to the

busts of the first and present governors of the empire state, above which are displayed in similar recesses, in the façade of the second story, heroic figures of Columbus and Henry Hudson. Over the arch of the portal is the great seal of New York, illuminated at night by hundreds of miniature lamps.

Entering the hall, with its mural paintings from Pompeian designs, the visitor finds on the western side the women's reception and other apartments, their walls adorned with silken tapestries and their floors of polished oak covered with Indian rugs. On the opposite side is a suite of rooms for men, and elsewhere are smaller chambers used for various purposes, while at either end is a colonnade, with open basins and



ANOTHER VIEW OF MAIN ENTRANCE





WEST PARLORS OF THE EMPIRE STATE BUILDING

Knickerbocker period, but with other points of interest. On one side of the room is the Dutch cannon which Bayard Van Rensselaer brought to New Amsterdam more than two centuries ago, and used only to announce the birth or death of members of his family. It is a most antiquated piece of ordnance, some five feet long, with wheels of solid wood, and mounted on a low, squat, wooden carriage. On a mantelpiece near by is a brown, flat demijohn, on one side of which a painting represents a game at cards in progress. Above is a life size portrait of Deborah Glen, one of the survivors of the Schenectady massacre. The damsel is attired in a gown of

flowered silk, with laced bodice and pink satin slippers, holding in one hand a rose and in the other a wreath of flowers. On the opposite wall a picture, blurred with age, portrays the destruction of this frontier trading-post, founded in 1620, exterminated in 1691, and now a thriving industrial centre.

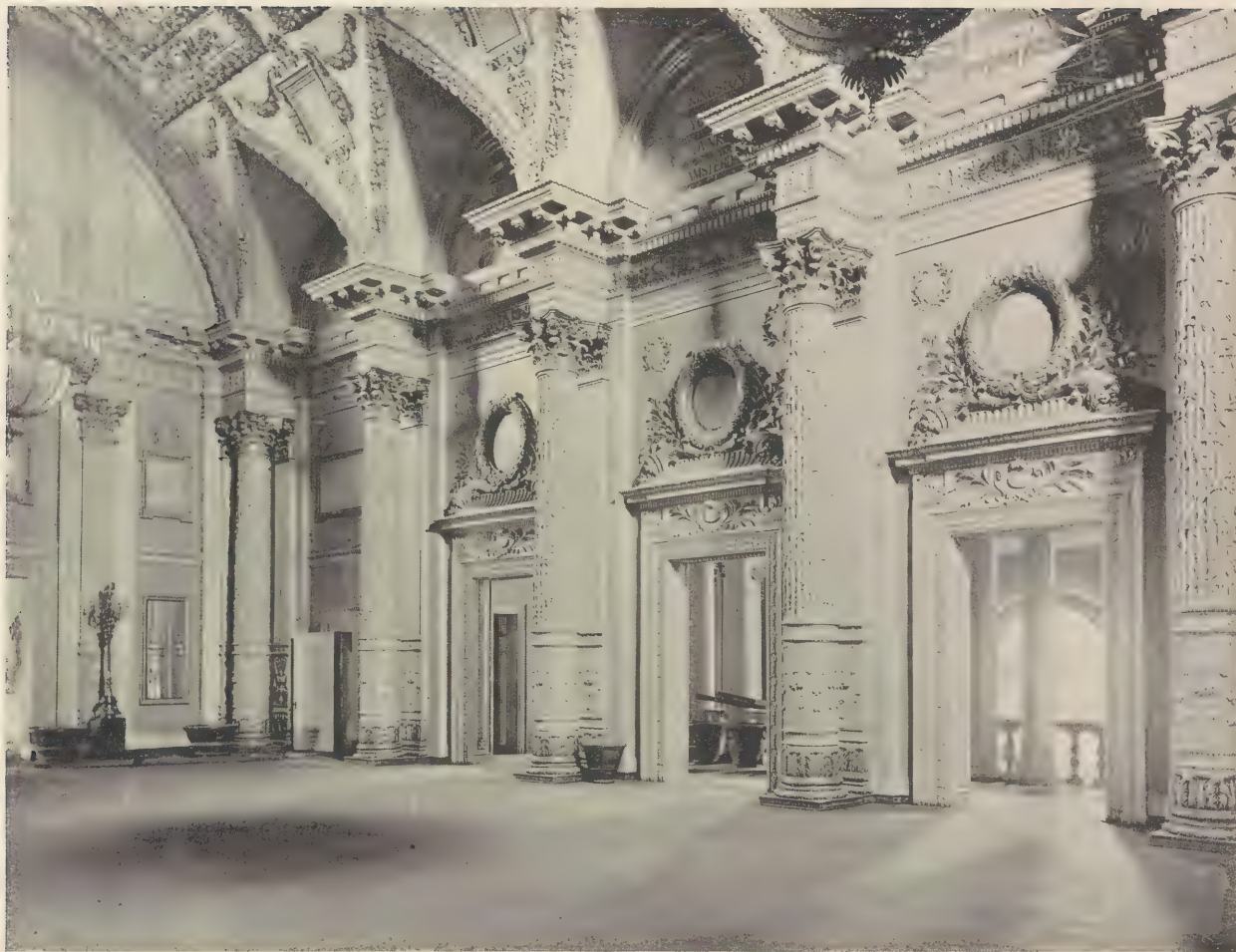
The original deed is shown to the Bayard property in New Amsterdam, bearing date 1656, its seal and writing still clearly defined, though the former is somewhat broken. Beneath it is a cabinet of Dutch and colonial relics, including a pulpit bible used in a Reformed Dutch church on Long island 250 years ago. On the shelf above is a heavy silver tankard, by the side of which are dinner plates with scenes of Knickerbocker days depicted on their surface. Hung over a red clay tile from the roof of the first building erected in New Utrecht is the "freedom suit" of brown linen presented by his master to Jonathan Sheldon, as was the custom in revolutionary times on the manumission of an apprentice. In other cases are Dutch dresses, spinning-wheels, candlesticks, tankards,

and standing clocks, with garments and fans that belonged to the women and snuff-boxes used by the men of colonial era. Elsewhere is the warming-pan which the captain of the good ship *Katrina* brought ashore with



CORNER OF THE BANQUET HALL





ORNAMENTAL FEATURES OF RECEPTION HALL

him to Staten island in 1664. There is a clumsy looking sled of Holland make, nearly two centuries old, and there is a small piano made by George Astor while his brother Jacob was gathering furs in the far northwest.

To a later period belong the two great silver vases which New York merchants presented to Governor De Witt Clinton on the 26th of October, 1825, on which day the governor witnessed the completion of his long cherished project for connecting Lake Erie with tide-water. Both vases are elaborately ornamented in relief, and with medallions containing views of the Erie canal. Here also, in a box of maple, the wood forming part of the first cargo that passed down the canal from Buffalo, is a silver medal presented to one of the promoters of the enterprise. In a frame are several of Robert Fulton's letters and sketches, one of the former showing a cross-section of a boat fitted with torpedo tubes, while a drawing explains how such a boat could be brought and its torpedoes used alongside a sea-going vessel.

Indian relics and curiosities are plentiful, among them a portion of the famous Hiawatha wampum, fashioned in token of the confederation of the five nations. Whether there lived such a man as Hiawatha is a matter of dispute; but there is no mistake as to the wampum, which probably belongs to the sixteenth century, and is one of the finest specimens of Indian workmanship. It is fashioned of pieces of mussel shells, thousands of which are strung together by deer sinews, forming the warp and woof, with figures in white wrought into a ground work of purple. The central figure is in the shape of a heart, and represents the Onondaga nation, with the Cayugas and Senecas on the right, and on the left the Oneidas and Mohawks. For the care of this symbol a custodian has always been appointed, and it was a part of the covenant that it should forever remain in charge of the Onondagas; but by means that need not here be related, it came into the possession of John Boyd Thacher, chairman of the executive committee on awards. On another piece from the same contributor is sketched the Long house, near Albany, where was signed the treaty of 1784, with figures on either side, thirteen in number, and supposed to represent the original states. A third, though little more than a fragment, is believed to be symbolic of the first intercourse between the white man and the confederated nations.

A prominent feature in the Ethnological display was the Onondaga Indian from whom Thacher procured the first of his wampum specimens. To him a wondrous spectacle was the pageant of Manhattan day, the 21st of October, on which day, as certain of the chroniclers have it, just 285 years ago, Hudson cast



anchor off Sandy hook, baffled in his third attempt to find a northwest or northeastern passage to China. As a fact the date was probably the 3d of September, 1609, and certain it is that on the 4th of October his vessel set sail homeward from the river which bears his name. But this is a matter of little importance; nor is it the only anachronism connected with the story of the Fair.

By nearly all the state and foreign participants a special day was selected on which their citizens gathered in force to do honor to the Columbian Exposition, and to celebrate, each in his fashion, some eventful epoch or incident in the land of their nativity or adoption. Of these brief mention will be made; for they formed a most pleasing, and to the management a most profitable feature, largely increasing the attendance for several days in the week throughout the term of the Fair. On Manhattan day the number of paid admissions was 298,928, this being exceeded only on four occasions, and that it was not larger was due to the lateness of the season; for winter and the closing of the gates were at hand, and visitors by tens of thousands were setting their faces homeward.

On the day before the celebration, and for several preceding days, the railroads were taxed to their utmost capacity, all of them running special trains, and each one crowded with visitors, of whom at least 100,000 were from New York. All came and were received in friendly mood, and the more so on account of persistent representations that the empire state was jealous of Chicago, and had been somewhat lukewarm in its support of the Fair. To this the exhibits of the former should have been a sufficient answer and if further disapproval were needed, it was furnished in the demonstration that was to follow. "Manhattan day," remarked Governor Flower, "will be a great occasion, and will do much to remove from the minds of the Chicago people the idea they seem to have that New York feels bitter toward them." And to the committee of celebration said Charles H. Schwab, representing the council of administration, "What is it you wish, gentlemen? You can have anything you want." Thus the most important feature in the ceremonies was the renewal or rather the cementing of good fellowship between the eastern and the midcontinent metropolis.

Festival hall was the building selected for the occasion, and never did it wear a more brilliant appearance than when the New York delegation stepped forth upon its platform. Dome, galleries, and pillars were festooned with the national colors; from the cornices depended the flags of all nations; encircling the balconies were the standards of states and territories, while in front of the platform was a mass of flowers and banners arranged in artistic groupings. Every inch of space was occupied, even to aisles and doorways, from which thousands were turned away, finding neither seats nor standing room. On the stage were the leading citizens of the imperial city, men foremost in official, commercial, professional, and social circles. Behind them were



DECORATIONS OF MAIN HALL

stationed the Thirteenth regiment band and the Columbian chorus of 800 voices, their music and singing alternating with the addresses and responses.

First on the programme was the overture to *William Tell*, after which came the invocation by a prominent divine, followed by brief addresses from the mayors of Chicago and New York, the latter acting as master of the remaining ceremonies. Next on the list of speakers was General Horace Porter, statesman, soldier, and orator, whose eulogistic and well rounded periods were interrupted by frequent applause. In conclusion he said: "Our two cities were contestants for the Exposition. Chicago won the prize. To-day the people of New York come to greet you, not only through their representatives, but they come themselves with hearts untouched by jealousy, with souls unmoved by rivalry, to cry out to you with the acclaim, 'God bless Chicago. God speed the great Fair.'"

After "The Star Spangled Banner," rendered by the Columbian chorus, the audience joining in the refrain, an ode was read, composed by a New York editor and entitled "New York to Chicago." Then spoke the



WOMAN'S PARLOR, WITH MURAL AND FLORAL DECORATIONS

president of the state board, Chauncey M. Depew, who was greeted with the applause which his orations never fail to elicit. After a few humorous remarks and anecdotes he lapsed into more serious mood, contrasting this peaceful gathering of states and nations with the affairs of Europe, whose monarchies are ever imposing additional burdens on their overburdened communities, converting the land into an armed camp, and strengthening armies and navies for the work of mutual extermination. Then touching briefly on the history and condition of the republic, he interlarded his discourse with a few adroit and well turned compliments, especially as to the celebration of Chicago day, when more than 700,000 visitors were admitted within the Exposition gates. The singing of the American hymn by the Columbian chorus was followed by an address from John R. Fellows, of New York, and the battle hymn of the republic by a speech from the president of Columbia college, after which came the benediction, and slowly the audience dispersed.

Meanwhile the state building, its lawn and the grounds adjacent had been thronged from the hour of opening the gates, the crowd increasing rather than diminishing as darkness approached. The structure was tastefully decorated, its archways and pillars wreathed in green and its handsome interior festooned with garlands, while at dusk its graceful contour was outlined in tracery of light. Presently came the civic and military procession, including the old guard of New York with its drum corps, the Chicago hussars, and the sons of New York, 600 strong, all wearing the Manhattan badge. This was followed by a procession of floats, illuminated by colored lamps, for now the night had fallen. A banquet was next in order, with more





EXPOSITION HEADQUARTERS OF THE KEYSTONE STATE

addresses; then came fireworks, with thousands of bombs and rockets setting the sky ablaze, and the celebration concluded with dancing in the reception hall.

To Pennsylvania an excellent location was allotted, near one of the principal entrances to Jackson park and fronting the palace of Fine Arts. Apart from its decorative scheme the building is of the colonial style of architecture, reproducing some of the features of Independence hall and especially its historic clock tower. The artificers came from the keystone state, as also did most of the material, the pressed brick for the outer walls, the tin which covers the roof, the wood and marble for wainscoting, panelling, floors, and staircases, the timber used being the finest that grows in Pennsylvanian forests. Above the main entrance is the coat of arms, flanked by statues of Benjamin Franklin and William Penn, on either side of which are groups symbolic of industries, science, and art. Around the edifice is a broad piazza; on the second story doors and windows open upon spacious balconies, whence outer stairways lead to a roof garden, from which is a striking coup-d'œil of grounds and waterways.



PANEL PAINTING. BY MRS BUSH BROWN

The interior was specially planned with a view to the accommodation of visitors from Pennsylvania, as a place where they might find relief from sight-seeing in social intercourse, surrounded with many historic and other attractions of national as well as local interest. At one end is a general reception room extending across the entire width of the building, its walls hung with rare documents and portraits of distinguished men. On either side are separate parlors for men and women; and there are smoking, writing, and press correspondents' rooms; a reading room in which are files of all the newspapers published throughout the state; a bureau of information in charge of a competent official, and a register on which are entered the names of visitors, with their place of residence and probable length of sojourn. To all Pennsylvanians a cordial invitation was extended, "regardless of

race, color, or nationality, to make the building their headquarters and resting place while at the Exposition, and to avail themselves of the facilities that were provided. Here they would find a home and the warmest of welcome."

The women's parlors were furnished and decorated by the art committee of Philadelphia, under the direction of its chairman, Emily Sartain, who is also one of the jurors of awards in the Woman's department. In the salon or reception room are several mural paintings, all of them executed by prominent artists. A panel by Mrs Bush-Brown shows a group of young girls dancing on the sward beneath the boughs of an apple tree, covered with the delicate blossoms of spring. On another panel Mrs Clements depicts the mellow fruit, with peasants about to gather the fruitage of the year. In one of the two panels by Jane Rongier, poetic or intellectual life is symbolized in the form of a young girl wandering, book in hand, adown a forest path, her features reflecting the thoughts suggested by some inspiring passage. On the other panel, entitled "Serious or Family Life," a young mother stands at the threshold of her cottage, spinning from the distaff, her eyes fixed lovingly on the cradle in which her babe is sleeping. A fifth panel by Sarah P. Dodson represents a number of female peasants resting in the harvest field toward set of sun, and grouped around an aged woman, to whose words they listen eagerly. The furniture of the main salon is in white mahogany, and of colonial pattern, with carpet of olive green and windows draped in satin of delicate tint.



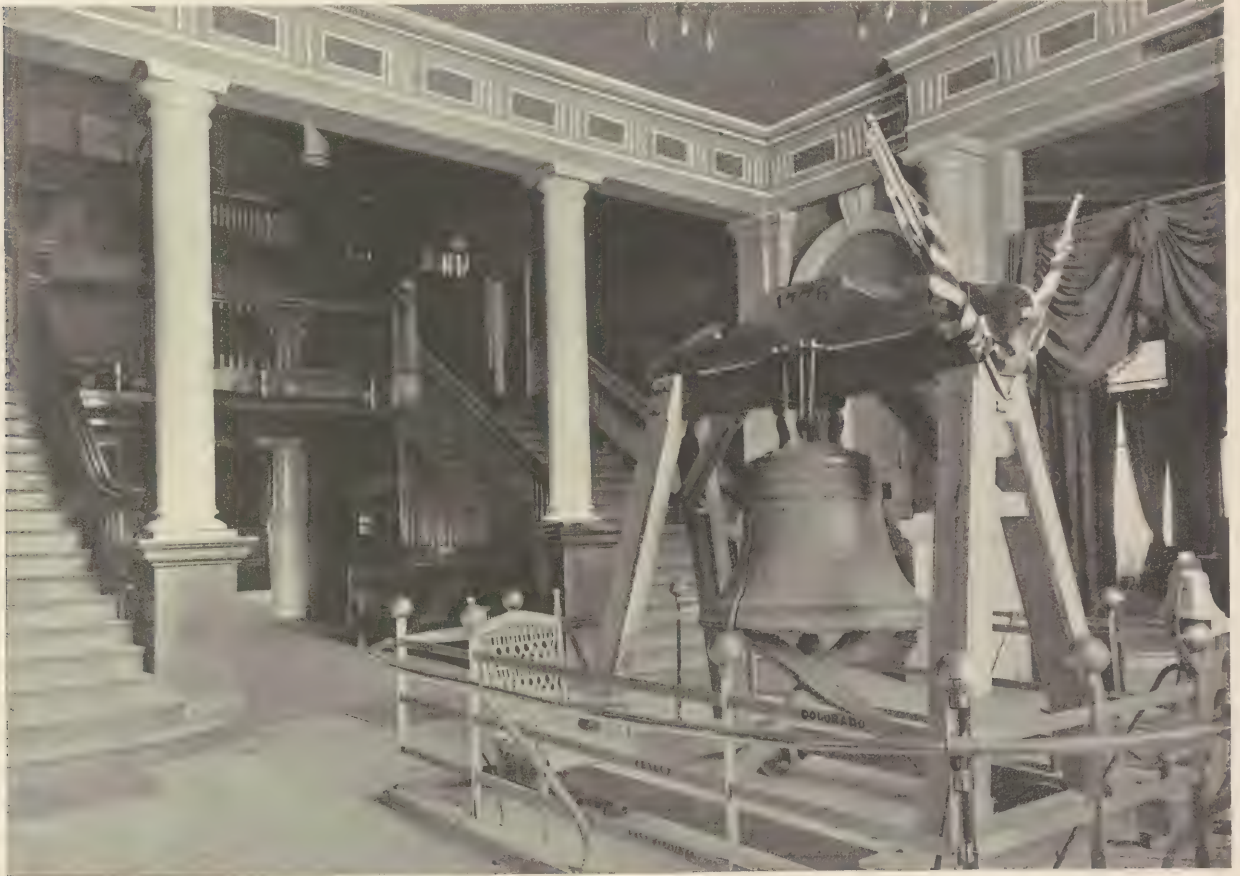


WELCOME NEWS

By Emily Sartain. Permission Raddke, Lauchner and Co

In the smaller room and the corridors is a large display of etchings, selected by Blanche Dillaye, and including several of her own compositions; but as these are more than seventy in number they cannot here be described in detail. Among the best of them is "Welcome News," by Emily Sartain, its life-like figures and environment portrayed with masterly touch. In stained-glass windows is shown what the women of Philadelphia can do in this direction, and from the Ceramic club comes a large contribution of hand-painted chinaware for tea-table and cabinet service. These, however, are but a few of the contributions from the women of the keystone state; for in the Woman's building, and in the hall of Manufactures and Liberal Arts, they are strongly represented.

As to the relics contained in the state building there is first of all, in the rotunda of the main entrance, the historic liberty bell. Of William Penn the memorial exhibits include his treaty with the Indians, his chair



THE LIBERTY BELL

and clock, his portrait and that of his wife. There is also the clock which Franklin used, his lightning rod, and his electrical machine. There is a portrait of Washington as commander-in-chief of the continental army, with the punch-bowl which he used in common with others during the revolutionary war. There is the sword of Anthony Wayne; the sword and desk of John Hancock, with a prayer in his own manuscript, the first one offered in congress. There are the watch and some of the raiment which Charles Carroll wore when he signed the declaration of independence; a hymn-book printed at Germantown in 1772; a model of the ship *Constitution*, with other records of the colonial and early republican periods.



STEPHEN J. MEEKER

The 7th of September was selected as Pennsylvania day, in commemoration of an event with which all the world is familiar. The attendance was larger than on any of the previous state days, with the single exception of Illinois, and of more than 200,000 persons who paid for admission at the gates, it is estimated that at least 40,000 were Pennsylvanians. Many there were among them who had come to compare the Columbian Exposition with that which, seventeen years ago, was held at their very doors, and especially to compare their home exhibits with such as were presented at the Centennial Fair. The programme was an attractive one, and none the less so that it was not over elaborate, and was carried out at the appointed time. At ten o'clock the procession entered Jackson park, at its head detachments of the Columbian guards



and of the city troop of Philadelphia, the latter in regimental costume of black, white, and gold, and bearing in front the blue standard of Pennsylvania. Then came the naval battalion, followed by governors Pattison, Flower and Altgeld, in carriages with uniformed outriders, other carriages containing the Pennsylvania commissioners, state and national.

A halt was called at the Pennsylvania building, profusely decorated with flags and flowers, the liberty bell in the hall-way wreathed with jasmine, and in front a platform for speakers and invited guests. For the audience seats were placed in the roadway; but these sufficed not for one tenth of the throng which crowded around the stand. The opening address was by A. B. Farquahar, state executive commissioner. Then spoke governors Altgeld and Pattison, the latter, as president of the state board, touching on the industrial and commercial interests of Pennsylvania, not in boastful mood, but with the worthy pride of one at the head of a community larger than was, at the dawn of the century, the entire population of the United States. After an address by George B. Massey of Delaware was one from James M. Beck of Philadelphia, who delivered the oration of the day; but perhaps the most telling speech was from Daniel H. Hastings, who spoke in humorous vein. John W. Woodside, a member of the National Commission, closed



NEW JERSEY BUILDING

the formal exercises, which were varied with music and singing. Then came a public reception with the usual handshaking, and a display of fireworks brought to a close the celebration of the keystone state.

New Jersey's domicile at the Fair is a reproduction of the building which served as Washington's headquarters at Morristown during the winter of 1779-80. Connected with it are many historic associations; for here it was that Alexander Hamilton wooed and won the daughter of General Schuyler; and here have been entertained more men of note than elsewhere in America were ever gathered under a single roof, among them Kosciusko, Lafayette, Steuben, Schuyler, Greene, Israel Putnam, and "Mad Anthony" Wayne. The structure is still almost

intact, and under the care of the Washington association of New Jersey, will be preserved with all its treasures for generations yet to come, as a landmark sacred as the Mount Vernon home of the old dominion.

Another wing and more piazzas were added to the original design; but the headquarters were in the main reproduced. The double front door, the diminutive window-panes, the primitive style of weatherboarding, outside chimneys and shingle roof, are exterior features which give to the edifice its quaint, old-fashioned appearance. The main hall, or rotunda, is covered with a rag carpet of the olden time, one entire side being occupied by a fireplace, with the fire-board of Washington's days above it. On this story is also a reception room, and above are parlors, a dining-room, and bedrooms for the accommodation of the commission, the last with antique furniture, the old massive four-post bedsteads and huge feather mattresses, so far



RECEPTION ROOM OF NEW JERSEY BUILDING

above ground that chairs are required to mount them. It may here be remarked that this furniture, which so aptly reproduces the early colonial pattern, was supplied by a Chicago firm, while the brick, tiling, and wall-paper are gifts from New Jersey factories.

No pictures are hung on the walls, and in this respect only the semblance differs from the original at Morristown; for as commissioner Hoffman remarked, there was not room on the sides of this little white cottage for the ancient paintings, maps, and genealogical trees that would have more than covered their entire surface, had all who were so disposed been allowed to display their family heirlooms. Nor is there any attempt at exhibits, except for the building itself, its simple decorations, and on a table in the centre of the hall, a few New Jersey relics, with the usual register for the recording of visitors' names. It is a home-like structure, furnished in homely style, a spot where the visitor from New Jersey would always receive a hearty welcome and find himself among friends.

On the opening day of the Fair the New Jersey building was one of the very few that were complete and in perfect order. On the following day, the 2d of May, it was dedicated with brief and simple exercises. A short address was delivered by Stephen J. Meeker,

president of the state board of commissioners. To this Governor Wertz responded in a few impressive words; the keys were handed to the Exposition authorities, and music by the Tomaso mandolin orchestra concluded the programme. No formal reception was held, the governor standing at the foot of the stairway and receiving the guests, among whom were the commissioners for other states and the representatives of several foreign powers. Later there was a social reunion, with refreshments served by waiters in colonial uniforms.

Among the first consignments of material forwarded to Jackson park were the native woods of which Delaware's home is constructed. It is a plain, unpretentious structure; but not without elements of the picturesque;



DELAWARE'S HEADQUARTERS



CONNECTICUT BUILDING

and though surrounded with stretches of lawn, is somewhat dwarfed by its close proximity to the palatial edifice of the empire state. The style of architecture is mainly of the southern colonial, the piazza which surrounds the lower story supported by a colonnade of Grecian pillars, and in front a handsome portico, with fluted columns reaching to the cornice. Its cheerful parlors, with antique furniture and decorations, are the most attractive features of the interior, and among the exhibits are articles of vertu and models of historic buildings, some of revolutionary fame and others erected far back in the seventeenth century.



Among the New England mansions, the Connecticut building, though intended merely as a pleasant rendezvous, is a handsome specimen of colonial architecture, with unique interior furnishing and decoration, such as prevailed in early times. It is a thoroughly homelike structure, and with its broad verandas and fluted pillars, its wide cornices and dormer windows, was so inviting of aspect that, even before being thrown open to the public, it was purchased by a citizen of Chicago for his future residence. Tiled floors, oaken cupboards, Dutch mantels, dainty tapestries, and carpenters' hardware, fashioned in special designs, are among the features which attract the attention of the visitor, the hardware representing an industry in which Connecticut is specially prominent. The walls, though seemingly covered with the most delicate paper, are in reality stencilled. On the first floor are the parlors and reception hall, a light well reaching to the roof. The stairway in rear of the hall leads to the story above, in which are apartments occupied by the executive manager, J. H. Vaill, and his family. Opening from the opposite gallery are three chambers daintily and yet substantially furnished, with antique bedsteads, and curtains



GOVERNOR L. B. MORRIS

and tapestries loaned by prominent families of the state. These are known as the Charter Oak, Washington, and Windsor rooms.

Among the special articles in the reception rooms is the furniture loaned by Mrs Monson, of New Haven, most of it at least a century old. A fine octave spinet of the eighteenth century is displayed by Steinert, the well-known collector of musical instruments, and the white pine mantel and large gilt mirror, with low cushioned seats in the recesses on either side, represent a somewhat later period. In the main hall is Israel Putnam's flint-lock gun, the one with which he killed the historic wolf, and a



RHODE ISLAND'S HOME

leather-covered chair brought from England nearly two centuries ago, and occupied by presidents of the United States from Andrew Jackson to Ulysses S. Grant. In this chair also sat Chief-justice Taney, when the supreme court rendered its decision in the Dred-Scott case. In the dining-room is a spacious fireplace of the olden time; upon the mantel, on shelves on the walls, and in corner cupboards are collections of quaint, old-fashioned crockery and other tableware, contributed by New England families. There are punch-bowls and plates of delicate blue, some of them decorated with figures such as were used for wall-papers not more than a quarter of a century ago. Huge sugar-bowls and tureens are covered with borders of flowers, and with landscapes enlivened by brute and human figures. There is a quaint settee, with rounded seat and back, and a chest of ebony and walnut, with handsome carved panels, which belonged to a bride of three centuries ago. Parson Newell's chair is here, rush-bottomed, capacious, and comfortable, with other antique chairs of mahogany and walnut, showing quaint combinations of light backing and seating with heavy carved framework. Finally, there are ancient mirrors of antique design, one of them with horns of plenty in gold and black.



E. B. ANDREWS

In the general departments of the Fair, Connecticut is well represented, and especially in the Woman's building, in the Educational division, and in the Agricultural and Horticultural sections. Connecticut tobacco, known as Havana seed-leaf, is largely advertised in Agricultural hall, while the rustic pavilion and the display of native woods in the Forestry building are somewhat of a surprise to those unacquainted with the state's resources in merchantable timber. Her silks and dress-goods are a feature of the Manufactures department, while in the Transportation building the Old Colony section of the New Haven railroad system furnishes one of the most interesting features in this connection.

Adjacent to the Connecticut building is a small structure of Grecian design, with a semi-circular porch in front extending to the height of the two stories, and other porches across the entire width, supported by



REPRODUCTION OF GOVERNOR HANCOCK'S RESIDENCE

Ionic columns and entablatures, with decorated mouldings and medallions. The roof is surrounded by a balustrade, wide French windows opening upon all the verandas, floors being of hardwood and the interior finish of cypress. Here is the home of Rhode Island.

The main hall is open to the roof and contains a number of historical relics, among them an old marble mantel said to have belonged to the residence of a wealthy colonist where, on the night of June 9, 1772, a plan was arranged by the men of Providence for the capture of the British schooner, *Gaspee*. Before daylight nine long boats, filled with determined men, were bearing down upon the British vessel which lay stranded upon a sand-bar. In the combat that ensued the English commander was wounded, and the *Gaspee* was set on fire after the crew had been landed. Here, it is claimed, was shed the first blood in revolutionary days.



FRANCIS A. WALKER

The hall and the mantel which it contains were the centres of interest to all classes of visitors, and especially to those from Rhode Island. The women's parlor, on the same floor, and the room set apart for the state executive on the second story were also attractively furnished, and in the atmosphere of the building and of the people who frequented it was suggested the watchword of the commonwealth. On Rhode Island day, the 5th of October, the blue standard of the state which Roger Williams founded was unfurled at the flagstaff of the





DUTCH KITCHEN MASSACHUSETTS BUILDING



WEST PARLOR OF MASSACHUSETTS BUILDING

dome, on its ground a golden anchor surrounded with thirteen stars and above it the motto, "Hope." The celebration was held in the music hall, E. B. Andrews, president of the Brown university and of the board of commissioners, introducing Governor Brown, who spoke words of welcome to the audience and touched briefly on the history and growth of the state. The orator of the day was Alonzo Williams, of Providence, a lineal descendant of the man by whom the original settlement was founded in 1636. A Newport detachment of artillery was reviewed by the governor and his staff, and a reception in the Rhode Island domicile concluded the programme.

Massachusetts erected as her home an edifice resembling closely the residence of Governor Hancock, which, standing as it did near the state capitol on Beacon hill, was long a familiar landmark of the New England metropolis. Set well back from the roadway, the building as reproduced at Jackson park is surrounded by a raised terrace, with flower beds and shrubbery, and inclosed within a low wall surmounted by a balustrade. At the entrance the visitor passes through a covered porch into a spacious hall, extending across the main structure, and thence an old-fashioned staircase, lighted with a bull's eye window, leads to the floor above. On either side of the hall are rooms constructed and furnished with all the solidity and simplicity of the New Englander of early times, while opening into them are mahogany doorways, plain but massive and polished as in the days of old. In all are antique mantels and fireplaces, with ponderous andirons, poker, and tongs.



EAST PARLOR OF MASSACHUSETTS BUILDING

The first apartment on the right is named the Dutch kitchen, with wainscoting of blue Dutch tiles, the quaintest of chairs and lockers, and on the walls portraits of the early governors of Massachusetts. On the opposite side of the hall is reproduced a suite of parlors from the Hancock residence, with furniture of the colonial pattern and cases of china and silverware from the Essex institute at Salem. Here the tables, sideboards, book-cases, and bureaus show how homes were furnished more than a century ago. Old manuscripts are plentiful, and in scores of portraits are represented men famous in the annals of colony and state. The smaller of the two parlors is used as a reading room, with files of newspapers, a grand

piano presented by a Boston firm, and in the centre a large round table of polished mahogany.

On the first landing of the stairway is an old-fashioned clock with moon-shaped face, and on the walls of the second flight are portraits of other celebrities, among them that of William Lloyd Garrison, with his signature appended, above which are inscribed in his own handwriting the words, "Liberty for each, for all, and for ever." Here also are Daniel Webster, Wendell Phillips, John Lothrop Motley, and James Russell Lowell, while in the hall above, with its antique furniture and tapestry, the latter fashioned by Massachusetts dames, are still other portraits, including a large oil painting of Charles Sumner. To the left of the hall is a chamber filled with relics, including the correspondence of John Hancock during his presidency of the continental congress. Washington's autograph appears in many an aged document, and there are tomes and manuscripts of historic interest, with colored prints by Paul Revere, one of them representing a platoon of British grenadiers firing on the men of Boston. To this chamber is given the name of the ladies' reception room, and among its contents are cases filled with costly brocades and laces, the finest of linens, the tiniest of slippers, and the hugest of balloon-shaped bonnets, these contributed from the heirlooms of the oldest of bay state families.

Crossing the hall the library is entered, adjoining which is a reproduction of John Hancock's bedroom, with its roomy four-post bedstead. On the walls of the former are the portraits and autographs of famous New England authors, with the signatures and brief extracts from the works of others prominent in contemporaneous literature. Nathaniel Hawthorne and Howells are here; Lowell, Bryant, and Holmes; Aldrich, Browning, Whittier, and Sir Edwin Arnold; Jean Ingelow and Harriet Beecher Stowe. There is the original manuscript of the national anthem which S. F. Smith wrote in 1832, and there are contributions from many others who have given to the world what the world will not readily forget. In one corner of the apartment is "the pilgrim bureau" which John Drew brought with him in 1660, and among the furniture is a writing desk





HALLWAY ON SECOND FLOOR

which Washington used, brass handled and with ivory border, these and countless other relics here and elsewhere in the building contributing to a unique and interesting display.

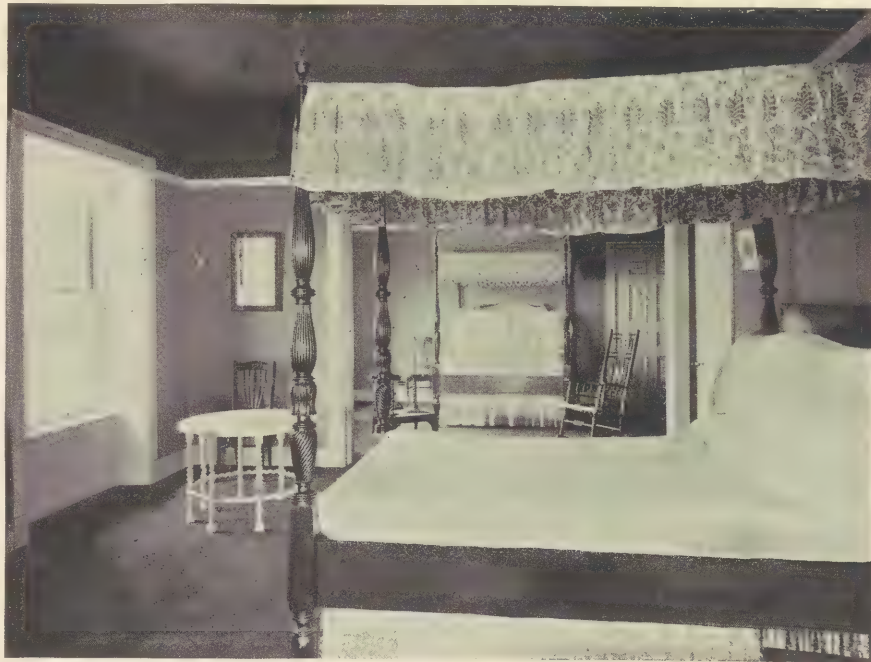
The anniversary of the battle of Bunker hill was selected for the celebration; for this is a day which the citizens of the bay state and especially those of Boston hold in religious veneration. The building was simply and tastefully decorated with banners, crests, and coats of arms, its spacious halls and chambers as cool and bright as those of the mansion which it represents. The attendance was one of the largest thus far gathered on the grounds, and never before had so many distinguished citizens been assembled in Jackson park. Among them were ex-President Harrison, Vice-president Stevenson, the president of the senate, the speaker of the house, and special committees of senators and representatives, with the national and state commissioners for Massachusetts, among the latter Francis A. Walker, chairman of the board.

The ceremonies were of the simplest and without formality. At the appointed hour Governor Russell and his staff arrived at the grounds, was welcomed by members of the state commission, and conducted to the reception room, where he shook hands and exchanged kindly greetings with the sons and daughters of Massachusetts, of whom thousands were residents of Chicago and other thousands were making the pilgrimage of the Fair. Then followed luncheon, and at night an elaborate display of fireworks was added to the general illumination, one of the pieces containing 1,000 rockets and filling the heavens with fire

of every hue. At the music hall patriotic addresses were delivered, and later a decorous New England feast ended the commemoration of a day which all Americans hold near at heart; for Bunker hill created the republic, as Yorktown made sure and solid its foundations.

Although one of the smallest structures of the Fair, the building erected by Vermont is among the most tasteful in design. It is of purely classic architecture, with wings or corridors encompassing an open court of Pompeian aspect; in the centre of which is a marble fountain. The floors are constructed of materials from the quarries of Rutland, and the tiling at the entrance-way is from the factories of Swanton. The furniture in the semi-circular hall and reception rooms is also largely the product of home factories, the walls having little in the way of decoration, except for a large portrait of Senator Morrill, one of the oldest and most respected members of the national senate.

In the home of Vermont are no exhibits, either of a material or historic nature; for it is intended merely as a pleasant meeting place for visitors attending the Fair and



MASSACHUSETTS' HISTORIC CHAMBER



GROUP OF STATE BUILDINGS WEST OF ART PALACE



as headquarters for the commissioners representing the commonwealth. But while containing no formal display, it shows to the best advantage the products of the Vermont marble quarries, and especially those of Rutland county. The marbles found in this vicinity are acknowledged even by foreigners as excellent material for sculptural



VERMONT'S HEADQUARTERS

purposes, and here, as well as further north along the shores of Lake Champlain, are obtained the most beautifully colored and variegated stone. From 2,000,000 to 3,000,000 cubic feet are annually produced, while in a strip of territory between Canada and Bennington are kaolin and bright-colored clays of superior quality for the manufacture of tiling. All this and other mineral wealth is illustrated in the little temple of the green mountain state, overshadowed by the more imposing edifices of Maine and Massachusetts.

Not only was the Vermont building a pleasant club-house for her sons and daughters, but twice at least during the progress of the Fair it became the centre of attraction. On the 10th of May it was dedicated in the presence of Governor Levi K. Fuller, ex-Governor William P. Dillingham, and an audience composed chiefly of natives of the state. Speeches were delivered by the two governors and also by James L. Martin, for many years speaker of the local house of representatives,

while prayer and music were portions of the programme allotted to Chicago. The building was accepted from the state board by the chief of the Anthropological department on behalf of the director-general. By this board, with Bradley B. Smalley as president and Governor Fuller as president ex-officio, the building was erected and the exhibits organized which brought Vermont into prominence, especially in the Mining, Agricultural, and Live-stock departments. On the 15th of September these and other triumphs at the Fair were celebrated, several thousand participants gathering around the maple-sugar booth near the south pond and the state building in the northern portion of the grounds. Sickness prevented the governor's attendance; but there was an informal programme of speech-making, W. W. Henry, of Burlington, acting as master of ceremonies.



CHARLES H. AMSDEN

Facing Lake Michigan, from whose waters it is separated only by a few rods of beach and boulevard, New Hampshire, "the Switzerland of America," erected as her club-house and official headquarters a Swiss chalet built of Georgia pine, with spacious balconies on each of its two stories and broad overhanging roofs, its base of granite of the light gray variety for which the state is famous. The design of the building is essentially Swiss, and the dark tones of the interior coloring, such as are seen in the

cottages of the peasantry, further maintain the architectural parallel. The entire structure was planned rather with a view to comfort than for architectural effect, as a haven of rest for wearied sight-seers, a rendezvous for families and friends, and a place for social gatherings.

Entering the building from an avenue on the lake shore, the visitor finds himself in a reception hall, with broad fireplaces of pressed brick on either side. Parlors for men and women and chambers for the meetings of the state board occupy a considerable portion of the space, the ladies' reception room being neatly furnished and containing a piano supplied by a Concord firm. In one of the apartments is a collection of portraits and landscape views from the state house, the walls of all the public rooms being covered with pictures of New Hampshire scenery, while on the upper story is a collection of relics and curiosities.



HOUSE OF THE GRANITE STATE



In the annex is a more elaborate display of art relating chiefly to the scenic glories of the state, with a number of transparencies in the darkened lower room, displayed under a strong electric light. Among them is a cycloramic painting of Livermore falls, above which variegated lights are so arranged that by the pressure of buttons the effect is produced of sunrise, noontide, sunset, and moonlight. In the room above is a grotto with dim cavernous recesses, and with stalagmites and stalactites clasping hands between floor and roof.



ERECTED FOR THE SONS AND DAUGHTERS OF MAINE

On the outer walls are more transparencies, sunlit and as nature paints, still of New Hampshire scenery and especially of the White hills. In a large horizontal relief map is shown the entire mountain system of the state, the visitor looking down upon it as he would from some lofty pinnacle far up in a cloudless sky.

The dedication ceremonies on the 27th of June were largely attended, and among the participants were many distinguished citizens. In the absence of Charles H. Amsden, president of the board, Vice-president Page read his address and presented the keys of the building to Governor John B. Smith, whose escort consisted of the Iowa state band and two companies of Amoskeag veterans. The latter were attired in the uniform of the continentals, and formed a picturesque element in the audience, which listened attentively to the speeches, especially that of the governor. Then came the informal portion of the programme. By John W. Hutchinson,

whose family of singers all New England remembers, was rendered the "Old Granite State," in a voice which still retained much of its old-time vigor. His song was followed by a speech from Fred Douglass, and before he had concluded, the famous colored champion was greeted by Isabella Beecher Hooker, sister of Harriet Beecher Stowe. Thus were accidentally brought together three well-known characters of the days preceding the civil war.

The site allotted to the state of Maine is at the eastern extremity of the grounds and of irregular shape, running to a point at one of the corners, and commanding an unobstructed view of the lake. As best adapted to its location, and also to display to good advantage the materials donated for its construction, a polygonal structure was erected, its walls of granite from a dozen quarries and its turreted roof of Monson slate. In general design it resembles the mediæval buildings of southern Germany, but with traces of the Scandinavian school of architecture. As to dimensions it is 65 feet in diameter, about the same distance from the floor to the base of the central tower, and 90 feet to the summit of the lantern which surmounts the roof. On the second story are balconies separated by projecting bays, and over the principal entrance projects the bow of a boat, suggesting the importance of the ship-building industries of Maine.

From a handsome portico, with arcade of granite columns, the vestibule leads directly to a rotunda, over which is a skylight of colored glass. Practically, all the finished woodwork, including doors, windows, and screens, is the product of home manufacturers and workmen. Parlors for men and women and offices for the use of the state commissioners open from the ground floor of the rotunda, one of its sides being occupied by a large fireplace, above which hangs a painting of the Poland springs and vicinity. Opposite is the main staircase leading to a balcony from which is access to the more secluded apartments. On the second floor are also the exhibition rooms, in which are curios and historical relics, with paintings descriptive of the romantic scenery of the pine-tree state.



WOMAN'S PARLOR, MAINE BUILDING



On dedication day, the 23d day of May, the building was tastefully decorated with bunting and floral designs, the approaches flanked with flowering plants, the balcony draped with the national colors, below which were pendants of pine-tree cones, while above the doors and windows were the standards of many nations resting on American shields. Among the thousands of participants were many natives of Maine who had settled and prospered in Chicago, the society styled "The Sons of Maine" attending en masse in honor of the occasion. In an apt and telling speech, Hall C. Burleigh, as head of the board of commissioners, introduced to the audience Governor H. B. Cleaves, who referred to the industries of the state, and especially her ship-building industries. On behalf of the sons and daughters of Maine spoke John J. Jewett, a resident of Chicago, and after some musical selections was read by the actress, Georgia Cayvan, the wooing scene between King Hal and Catharine in *Henry V*. Then stepped forward Madame Nordica, and in a neat and piquant speech excused herself from singing, as this was forbidden by her contract with the bureau of music. The exercises concluded with a reception, and in the evening a concert was given in the state building.

Turning to the southern states may first be described Virginia's home amid the city of the Fair, in which, though with scores of more costly and elaborate structures, there are few that attract more attention. When the members of the Virginia board, with their president A. S. Buford, were called upon to determine what manner of fabric they would erect at Jackson park, they were confronted with a somewhat difficult problem; for the entire appropriation for all purposes was but \$25,000, and how with this could they build and furnish an edifice that would do credit to "the mother of states and statesmen?" But the women of Virginia were called into council, and soon the problem was solved. "Why not reproduce the Mount Vernon residence of General Washington?" they said; for here was a plain and roomy building with little of ornamentation, one that could be reproduced at small expense, and as the home of the father of his country would be to American

visitors as the Mecca of their pilgrimage, and to foreigners an object of surpassing interest.

But even for such an edifice the funds were all insufficient; nor could they be readily supplemented in this war worn state with its heavy incubus of debt. Again did the women of the old dominion come to the rescue, accepting as a labor of love the task of raising money for constructing and furnishing their Exposition home. This they accomplished; and as the result is presented in fac-simile the house which, in 1743, Lawrence Washington built and named after his friend, Admiral Vernon, its timbers and framework still intact, and its spacious piazza still overlooking the peaceful landscape and the stately



WASHINGTON'S RESIDENCE REPRODUCED

river around which swept, as with the fury of a tornado, the storm of civil war.

The life-long residence of General Washington is a two-story structure, with twenty-five rooms in all, more than half of them contained in wings or dependencies as they were called, added by Washington himself. The largest of these rooms and those most worthy of note are the entrance and banquet halls, the library, the chamber in which Washington died, and that in which his wife passed the days of her widowhood, as the only one which did not look out upon his tomb. Not only is the edifice at Jackson park an exact reproduction of the original, but many of its contents are also reproduced in fac-simile, and while the priceless relics in keeping of the Mount Vernon association could not be obtained, there are many from other sources, not a few of them heirlooms belonging to the oldest of Virginia families. The furniture is of antique, colonial pattern, as are the mantels, the carvings, mouldings, and trimmings; and in a word there is little that is modern about this building, except for the people who frequent it.

Through the vestibule, the visitor passes between rows of pictures dating far back into the eighteenth century, and beneath bronze lions above the inner doorway, the latter once occupying a similar place at Mount Vernon, and recently discovered in the possession of an antiquarian. Thence he enters on the right the

banqueting hall, which is also used as a reception room, extending across the entire width of the building. Here will first be observed a life size portrait by Peale, a loan from Shirley, Virginia, one of the three that remain from the brush of this painter who, beginning life as a blacksmith, was appointed colonel of militia, and later betook himself to art. Of the remaining copies one is in Madrid and the third in Philadelphia, all of them depicting the well-known features of Washington as he appears in countless text-books. Another canvas represents General Lewis leading on his men at the battle of Stony point, and in frames are autograph letters from Washington to Landon Carter of Sabine hall. A feature in this apartment is a fac-simile of a carved mantel-piece of Carrara marble, with Sienna marble columns. The original was presented to Washington by



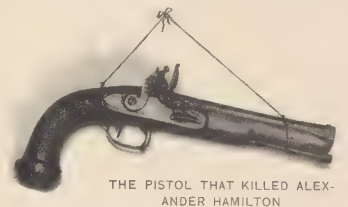
DOLLY MADISON'S HARPSICHORD

one of his English admirers; but was captured on passage by French privateers, who observing for whom it was intended, sent the gift uninjured to its destination. Another curiosity is the counterpart of a mahogany side-board used in the family dining-room at Mount Vernon. The latter fell into the hands of Robert E. Lee, and by his wife was restored to its former position. But the counterpart has also a history of its own; for a century ago it stood in the residence of Thomas Jefferson at Monticello, and later did duty as a hen roost, near the old Stone church among the mountains of West Virginia. From this degradation it was rescued by its present owner, and after being repaired and polished was forwarded to the Columbian Exposition.

In the library is a large collection of books by Virginian authors, or such as relate to Virginia, with an abundance of portraits, views and relics pertaining to the colonial and early republican periods. The books, which are displayed in handsome cases of native woods, are

several hundred in number, touching on a wide range of subjects, and nearly all of them donated, except for rare and valuable works. At the close of the Fair they were to be presented to the state library at Richmond, there to be preserved as a memento of the Exposition. To this library would also be transferred, as specimens of Virginia journalism in 1893, all the newspapers and magazines published in January of that year, and placed during the term of the Exposition in the reading-room of the state building.

On the second floor the rooms are also built and furnished as in the original structure, their windows with small square panes of glass, and the sashes held by a wooden button. In all are the old-fashioned four-post bedsteads, the one in Washington's chamber, formerly belonging to Governor Preston of Virginia, being an exact reproduction of that on which he died, and above it a linen counterpane of identical pattern with its coverlet. In the Lafayette and other rooms are many objects of interest, among them a chest of drawers which belonged to Martha Washington, a little inlaid box which served as her tea-caddy, a mahogany bureau which the surgeon of



THE PISTOL THAT KILLED ALEXANDER HAMILTON

Cornwallis used as a medicine chest, and the favorite chair of Cornwallis himself. There is a model of the harpsichord which Washington presented to his adopted daughter, and the original instrument touched by the fingers of Dolly Madison, an old dominion beauty. Of Thomas Jefferson there are several things to remind us, and first of all a photograph of "The Pines," a building in which he attended school and where he was married. Then there is his prayer-book with his autograph on the fly-leaf, the open-faced silver watch which he carried some ninety years ago, and the telescope with which he watched the progress of the Tarleton raid in Albemarle county. There is a broken mirror which belonged to Randolph of Roanoke, and a china pitcher in 1781 the property of Governor Nilson; there are china decanters of rare and singular pattern, and vases with brands of gold and heavy dragon-shaped handles. Finally there is a set of silver spoons fashioned by Landon Carter, who ordered them made of that metal only in case



OLD PIANO IN VIRGINIA BUILDING

the stamp act was repealed; otherwise they were to be made of horn, an inscription on the handles announcing the repeal and accounting for the existence of the spoons.

In one of the wings in rear of the building is a collection of waters from the mineral springs of Virginia,



some of them of world-wide repute. In the other is a display of forestry, with certain non-competitive exhibits that need not here be specified. Before taking leave of this time-honored mansion may also be mentioned a



THE RESTING PLACE FOR WEST VIRGINIANS

marble group of statuary contained in what would be the parlor or reception room of the original. It is by a Richmond artist and represents the Homeric legend of Andromache and Astyanax, the theme suggested by the following lines from the *Iliad*:

But now returning home thy works attend—  
The loom and distaff, and direct thy maids  
In household duties; while the war shall be  
Of men the care; of all indeed but most  
The care of me, of all in Ilion born.

The words are spoken, of course, by Hector, and Andromache is seated with distaff in her lap, her head slightly bowed and turned aside, with facial expression as though foreboding evil; for the fates have decreed that Troy shall fall; her husband be slain, and herself led captive to the Greek. The right hand hangs listlessly downward, and with the left she clasps Astyanax, in whose face is admirably portrayed his childish affection and wonderment.



W. N. CHANCELLOR

Such is the new Mount Vernon of the Fair, the home of Washington as here represented facing one of the principal avenues of the park, in front a grassy lawn on which are trees of natural growth, and near by the waters of an inland Mediterranean suggesting the broad reaches of the Potomac. Not only to the state board of managers but to the men and women of the state in all its counties each of the counties with members of an auxiliary board, was due this perfect reproduction of the historic mansion in which for centuries to come will be stored its relics of colonial and revolutionary days. When the original could not be obtained, each article was sketched with the utmost



WHERE THE VISITORS REGISTER

care, and the result was a perfect mirror of the times, even to the aged negroes appointed for domestic service. In none of the state exhibits is there more of interest, and not least among the attractions of this old Virginia home is the charm of its perfect simplicity.



RECEPTION HALL, WEST VIRGINIA BUILDING

delivered the oration of the day, dwelling on the history of Virginia, her influence in shaping American institutions, and concluding in part as follows: "A day shall dawn when the United States of America shall embrace the North American continent from Alaska's fields of ice to the land of the Montezumas. Another day shall come when bonds of union shall bind together the greater America and the greater Britain, and they shall rule the land and the waves with the voices of the latest language that man has learned to utter. And then, beyond, yet another day shall come when the United States of the world shall assemble their representatives in session. Who can doubt that they will write their records in the tongue first spoken on this continent by the adventurers at Jamestown?"

West Virginia and Delaware stood side by side in Exposition affairs, celebrating together the opening of their buildings and uniting later in the season, in a day of public commemoration. The date selected for the dedication ceremonies was the 19th of June, the thirtieth anniversary of the admission of the former among the sisterhood of states. As West Virginia, while a portion of the old dominion, played a prominent part in the civil war, many of the articles displayed in her building relate to the history of those troubled times. Upon a small secretary stands a plain inkstand, both of which, it is claimed, were used by Colonel Alexander, of the staff of General Lee, when he drew up the articles of surrender at his chieftain's dictation. A rosewood, chintz-covered sofa comes from the McLean



MARYLAND'S PAVILION





RECEPTION HALL, MARYLAND BUILDING

of the culture and hospitality of her people. From the main entrance, over which is the coat of arms in bas-relief, the visitor passes into a vestibule and thence into the rooms reserved for members of the state board. Parlors for men and women and a large reception hall occupy the main portion of the ground floor, and above is another hall of generous proportions, around which are several committee rooms. Four wide fireplaces, two on either floor, with wooden mantels carved in antique style, add to the homelike appearance of the interior.

In the general departments of the Fair West Virginia has a most creditable display, and especially in mining, forestry, and agriculture, her exhibit of coal being one of the features of its class. The state board,

of which W. N. Chancellor is president, has every reason to be satisfied with its work, not only in the construction of its official edifice, but in the representation of progress and development in things material, moral, and intellectual.

In accord with the general plan appointing certain days for each of the states, West Virginia and Delaware united, as I have said, in a joint celebration, the first event of the kind recorded in the history of the Fair. The exercises were held in Festival hall, W. A. McCorkle, governor of the former state, and R. J. Reynolds, of the latter, representing their respective commonwealths. McCorkle referred to West Virginia's position as a source of the coal supply of the south and west, and as a centre of the iron and oil industries, while Reynolds remarked that although Delaware was not as large as her sister state she was nevertheless a state to be proud of, that she was the first to adopt the constitution, and that her patriotism was a part of American history. In accepting the building at the hands of the board, General St Clair referred to the resources of West Virginia and the excellent use to

which they were put. More than one-third of her brief existence as a separate commonwealth had been spent in adjusting the troubles connected with her birth; and yet she had more than doubled her population and aggregate wealth. Delaware was also the subject of rhetorical encomium, and before and after the formal exercises there were separate gatherings in the homes of each of the states.

It was originally intended that the Maryland building should be a reproduction of the state edifice at Annapolis; but the design finally adopted was that of a manor house of generous proportions, such as might have stood on the shores of Chesapeake bay during the colonial period. The structure is two stories in height, with flat deck roof from which is an excellent view of the Exposition and its grounds. From the principal entrance there is access to the main hall, in the middle of which is a relief map of the state, covering more than 120 square feet, fashioned under the direction of the United States geological survey, and showing its diversified land and water surface. Here also, as mounted specimens, are the birds and animals indigenous to Maryland, with exhibits explaining the work of the Johns Hopkins university and the McDonogh school. The display of the former institution consists of a series of maps and charts of the work of its various departments, with a number of handsome volumes and scientific periodicals.



GOVERNOR FRANK BROWN



ONE OF THE PARLORS

To the right of the main entrance are the ladies' reception and exhibition rooms, furnished by women, with windows curtained in silk, light sofas and chairs, walls hung with paintings, and a grand piano finished in white and gold. For the tasteful equipment of these apartments credit is due to the Woman's Industrial exchange of Baltimore and to the individual exertions of Mrs William Reed. On the other side of the vestibule is a room in which native products are grouped, the



EXPOSITION OF OYSTER INDUSTRIES

most unique exhibit representing the oyster industry, in which the several branches of planting, dredging, and packing give employment to more than 50,000 people and \$10,000,000 of capital. Around the Chesapeake peninsula are some of the largest oyster-beds in the world, and here their reproduction in miniature, together with photographic illustrations, was one of the features of the display. There are also models of oyster dredges and of the schooners which carry the products to market. Of interest to many visitors are the vessels constructed of timbers steeped for months in oil and tar, staunch enough to outride the roughest storm and with no superiors in speed and durability. Elsewhere in this chamber are samples of Maryland tobacco, cereals, slate, building stone, glass sand, coal, and other minerals. There is also shown the infusorial earth of Calvert county, used for various purposes and pronounced by chemists and geologists to be the finest in the world. In a separate collection are the medicinal herbs indigenous to the state.

On the second floor are parlors for men and women, smoking, reading, and writing rooms, some of them containing antique furniture, and on their walls the portraits of historic characters. There is a large photograph of the stately tree in the campus of St John's college, Annapolis, under which gathered the Indian tribes whose home was in the forests of Maryland. Here in the seventeenth century the chiefs of the Susquehannoughs smoked the calumet, and more than a hundred years later the white men first met in state convention. The historic tree is from eight to nine feet in diameter and probably more than five centuries old. The modern aspect of Maryland is depicted in a series of views of prominent buildings and monuments in its towns and cities, and especially the water system of Baltimore, with its reservoirs, pump-houses and distribution of pipes.

Maryland held her celebration on the 12th of September, thus commemorating the bombardment of Fort McHenry by the British, and the defense of Baltimore against a combined attack by land and sea, just seventy-nine years before. "The Star Spangled Banner" was born of this period of tumult, and Francis Scott Key and his national anthem were honored during the exercises held in the music hall. Cardinal Gibbons, attired in scarlet robe, was present, Governor Frank Brown, president of the state board, and John V. L. Findlay taking a prominent part. In the evening there was an elaborate display of fireworks; but, on account of threatening weather, the promised imitation of the bombardment of Fort McHenry was postponed.

Of Kentucky's part in the Columbian Exposition frequent mention has been made in the chapters devoted to the main divisions of the Fair. That Kentucky would appear to good advantage in the agricultural and live-stock, the mining and manufacturing divisions, was of course expected; but in other directions also her exhibits were somewhat of a surprise. Here were fully represented the resources and industries of a state which raises more than 50 bushels of cereals and more than 100 pounds of tobacco a year to each of her 2,000,000 inhabitants, producing of the latter some 40 per cent of the total crop of the United States. Of all agricultural products the annual value is probably not short of \$100,000,000, and her live-stock is worth at least as much, with a steady increase in the number and value of horses and horned cattle. Of coal the output rose from less than 500,000 tons in 1874 to 1,555,000 tons for 1884, and will exceed 2,000,000 tons for 1894. Her iron ores are widely distributed and in abundant quantity, averaging, so far as worked, nearly 50 per cent of metal. In manufactures Kentucky ranks first among the southern states, her products valued for 1892 at more than \$108,000,000.

For representation at the Fair \$100,000 was appropriated by the legislature, and of this amount about one third was devoted to the state building, its equipment and ministration. As an architectural composition it is typical of the style prevailing in the colonial era of the south, reproducing in part an old Kentucky



LIBRARY IN MARYLAND BUILDING



homestead of the better class, and intended rather as a club-house and a place for social intercourse than for the display of exhibits. In front is a spacious portico, the entrance-way leading into a central rotunda, where



KENTUCKY BUILDING

is a statue of Henry Clay, and among other portraits that of Henry Watterson. Thence there is access to the parlors and reception rooms, the post-office and other apartments intended for the accommodation of visitors. At the further end of the court is a cheerful and well lighted dining-room, communicating with the kitchen and store-room, all as in the old-fashioned Kentucky home. Over the door of the dining-room a platform is erected, with galleries around the second story, for public gatherings and speech-makings. In front of the second story are three exhibition rooms which can be thrown into one, their contents consisting of the raw products of the state and a number of historical relics, among the most valuable of which

are those from the Filson club. Elsewhere on this floor are the committee rooms, the commissioners' headquarters, and smaller chambers used for various purposes. The decorative scheme of the building is simple and tasteful, the exterior painted a rich cream color and the interior finished in white and gold, the hard woods and most of the other materials used being donated by the citizens of Kentucky.

The 1st of June was selected for the dedication ceremonies; and of the thousands assembled to do honor to the occasion nearly all were Kentuckians, among them not a few whose ancestral record was inscribed in the annals of the state. The members of the state board of managers were present, and at the time appointed their president, W. H. Dulaney, followed the opening prayer with a brief address, and then introduced to the audience Governor John Young Brown, whose speech was in the nature of a panegyric on the results achieved by the commissioners and on the state of which he was the chief executive.



MISSOURI BUILDING

The orator of the day was William O. Bradley, who after a spirited encomium on the grandeur and the great future of the republic, spoke of the part which Kentucky had borne as a factor in its history. On the conclusion of his address an adjournment was made to the grounds on the northern side of the building, where was unveiled a plaster statue of Daniel Boone, presently to be cast in bronze and placed in the rooms of the Filson club at Louisville.



W. H. DULANEY

Though not the largest of the state buildings, Missouri's mansion is one of the most elaborate, its general plan being that of a square, with a large semi-circular space at its southeastern corner, where the main entrance faces two converging avenues. In style of architecture it is of the French renaissance, resembling somewhat the chateaus in which dwelt not a few of the founders of Missouri, when from the lower portion of

main entrance faces two converging avenues. In style of architecture it is of the French renaissance, resembling somewhat the chateaus in which dwelt not a few of the founders of Missouri, when from the lower portion of

the Louisiana colony they migrated to St Genevieve and other points on the Missouri river. The large elliptical dome, with richly moulded cap piece and ornamented roof, flanked by mosque-shaped towers, forming together the key-note of the design, is suggestive of oriental treatment. A tinge of sky-blue appears at the apex of the dome, with a few stars sprinkled around it, these bright colors relieved by a border of terra cotta. Yellow is the prevailing tint of the exterior, the semi-circular indenture being finished in cut stone of a rich



ST JOSEPH'S PARLOR

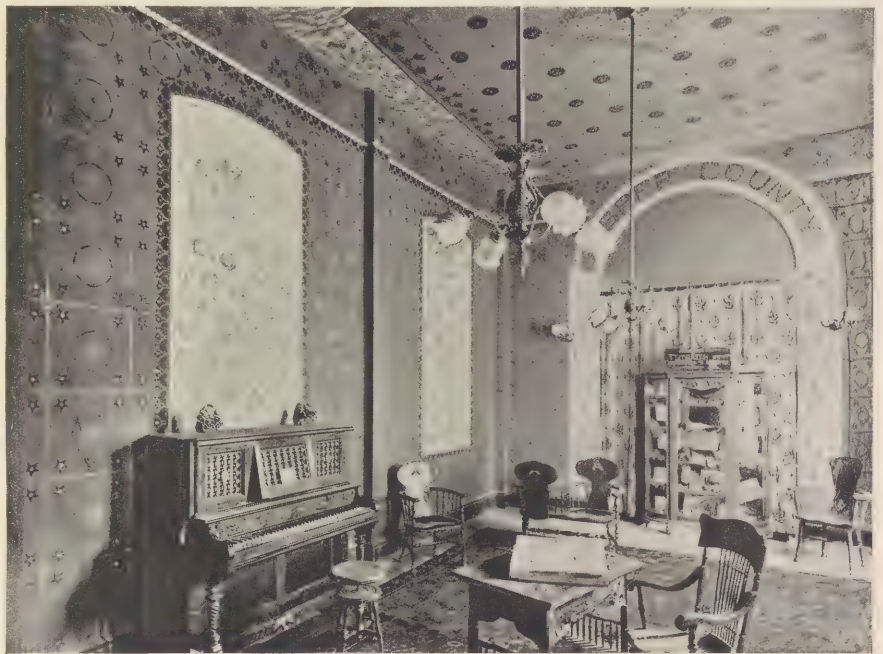
brown. Over the main portal is the state coat-of-arms, with the figure of a bear on either side. Wings constructed of wood and staff extend from the central dome, its flanking towers and the principal entrance-ways. In front of the building is a spacious balcony with floor of Florentine mosaic, itself a work of art.

Within the main entrance is a large rotunda, paved with handsome tiling, from which open the apartments of western Missouri and Kansas city, eastern Missouri and St Louis, with one set apart for the press. Here also are the reading-room and library, the bureau of information, the offices of the executive commissioner, and postal and telegraph accommodation. Near the press room is that of St Louis, with tinted walls, antique wood-work of oak, the richest of furniture and the most delicate of tapestries. The Kansas

city chamber is finished in quarter-sawed oak, with frescoed ceiling and hardwood floor covered with costly rugs. Adjoining it is the Jasper county room, in the decoration of which were used several tons of lead, zinc, and barytes, with designs worked in pulverized forms of these minerals, in shades of yellow, red, and blue, and with pieces of ore cemented upon the walls as background. When lighted by electricity, the effect is of surpassing beauty.

Two broad oaken stairways lead to the floor above, the feature of which is the room prepared for the governor of the state, its walls and ceiling with rich decorations of hammered gold, and golden background, on which are designs in silver and green, with wood-work painted in lilac bordered with gold, together forming an

harmonious blending of colors. The large double window with cathedral top, shaded by silken curtains of gold and cream, with carpet of soft moquette, are donations from the women of Missouri. By the women of Jefferson city the public reception room was finished in dark mahogany, with mural panels of silk and paintings in water colors. For the commercial travellers of Missouri a room was furnished by their Protective society, in connection with the citizens of Greene county. On the ceiling is the monogram of the travellers within a wreath of sycamore leaves in blue, white, and gold, the colors of the association. In all there are more than thirty apartments, including a large auditorium, with reading-room and adjoining parlors for men and women.



MINERAL ROOM IN MISSOURI BUILDING

Some ninety feet square and erected at a cost of \$45,000 Missouri's edifice is one of the most sightly of the minor structures of the Fair. The furniture and draperies are largely of home material and make, the wood from native forests and the fabrics from local factories. Mining industries are well represented in the room decorated by Jasper county, which, together with Newton county adjacent, furnishes at least one-half of the pig



lead produced in this state, as well as a considerable portion of that which is extracted from galena ores. Among other localities where this metal is found is a series of caves in Washington county, where more than 2,000 tons of pure lead were found adhering to the walls and roofs. In the mines of Jasper, Newton, and elsewhere in the southwestern sections are deposits of zinc in conjunction with lead, and often in such masses as to interfere with the working of the latter. Missouri also ranks high as a producer of copper and iron, the so-called Iron mountain being pronounced by experts to be the richest body of ore that is known to exist. Shepherd mountain, Pilot knob, Scotia Iron banks, and Iron ridge are other localities which yield abundantly of this metal. Scattered throughout the state are the clays of which was made the tiling for many of the floors, sandstone, limestone, and marble being used for the main entrance and the fountains of the rotunda.

But of Missouri's exhibits only a small portion is displayed in her building and its contents. In the main departments of the Fair the state appears to excellent advantage, and especially in the Agricultural division, where the fertility of her soil is exemplified in many specimens of corn, wheat, oats, and tobacco, with brands of flour exported to many foreign countries. In the Mining, Live-stock, Dairy, and Horticultural sections, Missouri is also prominent, and for these and other collections ample provision was made from the liberal sum

set apart by the state for representation at the Fair.

On the opening day of the Exposition the building was dedicated by the members of the National Travellers' Protective association. What was known as Missouri day fell on the 30th of August, and began with a parade of live-stock, witnessed by many prominent citizens. Among the speakers were Governor Stone, ex-Governor Francis, and Pope Yeaman, the work of the commission being reviewed by the manager of the board, J. K.



THE MANSION OF ARKANSAS

Gwynn, who accorded due honors to N. H. Gentry, its president, and Nathan Frank, its vice-president.

Arkansas and Texas owe their representation at the Fair largely to the efforts of women. Although the legislature of the former voted against an appropriation of public funds, at the invitation of James P. Eagle, ex-governor of the state, delegates from the several counties assembled at Little Rock and formed an association authorized to issue Exposition stock. It was also determined to organize a board of directors and an auxiliary board of women, including four national commissioners, among them the wife of the governor. Funds were readily obtained, and ground was broken for the erection of a building according to the plans submitted by Miss Jean Loughborough, whose design was preferred to those of professional architects. The structure is of the renaissance style, and suggests the French traditions connected with the early history of Arkansas. Its dimensions are 60 by 85 feet, with a central court 30 feet square, surmounted by a glass cupola. In the middle of the court is a fountain constructed from the crystals found at Hot springs and in the so-called valley of vapors. This is a contribution from the women of that locality, Mrs Ellsworth furnishing the design, in which the main feature is a cherub holding aloft, as the emblem of the state, a large passion flower, its petals studded with minute crystals, and the entire structure resting upon a bed of beautiful specimens.



MRS JAMES P. EAGLE



TEXAS BUILDING

painting executed on chamois skin and designed for a piano cover. Elsewhere are designs in thread lace, a piece of sculpture by Vinnie Ream Hoxie, a former resident of the state, and busts in bronze and marble of distinguished men. A literary and art memorial was prepared in the shape of a large illustrated work, filled with contributions from female writers and artists of the day. The children of the public schools also contributed specimens of their work to a souvenir volume, whose preparation was under the special charge of J. H. Shinn, superintendent of public instruction.



STATUE OF HOUSTON

The interior of the building, which is entered from a large circular portico is tinted with tasteful blending of colors, its ornamental work being wrought in gold. A broad hall-way leads to the rotunda, and thence extends to the assembly hall at the rear, one of the features in which is a massive mantel of native white onyx, with columns and vases of the same material elsewhere in the building. On the second floor are parlors for men and women, and rooms for the use of the state board, to all of which there is access from a broad open gallery.

Marshaled by Mrs B. B. Tobin, the women of Texas brought their state into line, as was thus explained by the superintendent of schools, Alexander Hogg: "Texas is not here as a state, sustained and backed by the strong and efficient aid of her treasury. She is here through the generosity, the pride, and the patriotism of her women and school children, and through the substantial assistance afforded by three of her railroads. Texas is greatest territorially, is first in the production of cotton, is first in the production of cereals, first in the number of cattle raised, first in the number of sheep raised, first in the number of mules and horses, and first in the amount of money and lands set apart for her public schools." To this he might have added that the number of cattle in Texas is larger than in all the New England, middle and southern states combined, amounting in 1891 to more than 7,000,000 head, valued at about \$62,500,000. Of cotton the yield is not far short of 1,000,000,000 pounds a year, and of corn the crop for 1888 was 92,400,000 bushels, though her yield of the latter is exceeded as a rule by several of the western states.

The subscription of \$30,000, which enabled the state to erect a home

Around the court are grouped the reception and exhibition rooms, specially connected with the women's department and furnished by Columbian clubs organized throughout the state. By legislative enactment the personnel of the board of directors was changed, none of the first members being retained, excepting Colonel James Mitchell, its president, and Fanny Scott its lady manager. Largely through the efforts of the latter was imparted to the reception rooms of the Arkansas building an air of true southern hospitality, while credit is also due to Mrs Margaret Ratcliffe, president of the Little Rock club, to whom was intrusted their furnishing. The Helena room contains a handsomely carved table, and by the artists of Little Rock their headquarters were adorned with pictures, among which "The Scene in a Cotton Field" attracted much attention, as also did a



MRS B. B. TOBIN



of its own, was raised through an association of women of which Mrs Tobin was president, Miss Hallie Holbert being one of the most active workers. The school children contributed their pennies, and the corporations their dollars, church sociables and fairs, private theatricals, and a score of other devices being kept in motion to collect the fund.



FORT MARION REPRODUCED

offices for social and business purposes. These include not only administration quarters, but accommodation for the state press association, the ante-rooms being chiefly furnished with articles made of the native woods of Texas. In the skylight of the hall is the lone star fashioned in mosaic work, and a statue of Sam Houston is also a feature of the central court.

Quietly but heartily the visitors from Texas and many others held friendly celebration, the day selected being the 16th of September, when every corner of the building was crowded with participants, while thousands could find no place within its doors. There was music by the Iowa band and by Kutzenberger's Columbian chorus, with solo singing by his wife. After an address of welcome by Mrs Tobin, ex-Governor Hubbard delivered the oration of the day, selecting as his theme the women of Texas, and referring also to the products and resources of the state. Then by the Women's association were presented medals and floral tributes to those who had rendered good service in the erection of the building. To Charles S. Morse and W. H. Harley gold medals were handed, and to John T. Dickinson and Ida L. Turner, a star and heart of roses. A recitation

and a song ended the formal exercises, and in the evening a ball concluded the celebration.

By the Florida, as by the Texas legislature, no public funds were voted for representation at the Fair, the exhibits and buildings of both being furnished through private enterprise. In the Mining department the former has a large collection of phosphates, taken from surface deposits and from the beds of rivers, the peninsula state being now one of the chief sources of supply for this valuable



ARTHUR C. JACKSON

fertilizer. In the Horticultural and Agricultural divisions Florida presents an attractive display of semi-tropical vegetation, and elsewhere expression is given to various industries and arts.

Florida's home at Jackson park is a reproduction, on a scale one-fifth the size of the original, of old Fort Marion at St Augustine, the oldest structure erected by the Spaniards in what is now the United States,

The building is in the style of the Spanish renaissance, with square towers at the front corners, connected by two-story loggias. The main structure and its towers are roofed with Spanish tiles, the windows and the spandrels of the arches elaborately carved. The latter are of Moorish architecture and the former patterned after the old catholic missions of San Antonio. The principal entrance is from a wing, whence the visitor passes through a richly carved doorway into a square court or hall, from which open rooms and



ENTRANCE TO FLORIDA BUILDING



and many years the centre of Spanish power on the Atlantic seaboard. Founded in 1620 and not entirely completed until nearly a century later, the fort and its vicinity were the scene of many a bloody conflict between the Spaniards and the French. It was built at the extremity of a massive sea-wall and covered, as is its model, with coquina shells. The original covers about four acres, with bastioned wall 20 feet in height, and is a fine specimen of mediæval architecture. It is encompassed by a deep moat, now overgrown with



CENTRAL COURT

weeds and thistles, and contains in all 24 rooms, with an interior court 105 feet square. In its reproduction at the Fair, the miniature court is planted with palms, flowers, and other typical forms of Florida vegetation. The cocoa-nut, sago, date, and cabbage-palm are also displayed on the plat around the main entrance, representing the principal gate of Fort Marion, on one side of which is a pyramid of phosphate rock.

Instead of the casements of old Fort Marion, some of which served as dungeons, there is a series of small connected apartments, surrounding the court and furnishing accommodation for the executive officers, while used also for the display of fancy articles, of mosses, ferns, shells, fruits, minerals, and photographs, not to mention infant alligators and chameleons. Here also are sea-island cotton, sponges, and cabinets containing more than 200 samples of native

woods. Of fruits there are many specimens, with practical illustrations of the methods of canning, whereby the most delicate and luscious varieties are made to retain their flavor and natural appearance. Elsewhere are sponges in different stages of growth, and turpentine in process of being extracted and refined. The display is varied and unique in character, as are the exhibits in all the principal divisions. During the term of the Fair, two-score employés, under the direction of Arthur C. Jackson, were stationed within and around the building, the revenue derived from the sale of articles forming the basis of the fund with which the state collections were installed in the main department of the Fair.

Although represented in the Agricultural, Forestry, and other departments, Louisiana's strength is mainly concentrated in her state edifice, built of native woods and a typical mansion of old creole days. Its broad roof, with dormer windows, overhanging the piazzas which partially encompass the building, are familiar even to modern travellers in the furthest south. The floor of the upper balcony forms the roof of the lower piazza, each supported by a single row of pillars, the windows of the lower story reaching to the ground.

But the exhibits within, the paintings, curios, ceramics, manuscripts, and furnishings are more representative of the annals and industries of the state than is the structure itself. Eight of the rooms are devoted to these collections, and there is a kitchen in which are served dishes of creole origin, rice figuring largely therein, with specimens of the different forms in which it is prepared and the processes by which it is raised. The cooking and the sewing are performed by Acadian women, who, in a chamber specially reserved for the purpose, also give practical illustrations with ancient spinning-wheels and looms of an industry of olden days.

The so-called curio room is panelled in native woods, its walls hung with flags associated with the history of the state and covering all the periods of foreign and domestic rule, while as relics of the Franco-Spanish days are antique sabres depending from the cornices. Most of the treasures here displayed are from the Creole gallery of art in New Orleans, and formerly belonged to the oldest and most aristocratic families of Louisiana. Among them are paintings once the property of Napoleon Bonaparte and Louis Phillippe, with those which Joseph Bonaparte brought to the United States in 1815, and there is the slipper worn by



CURIOS IN FLORIDA BUILDING



Pauline Bonaparte, of the Naples branch of the family. Elsewhere is an old silken flag made by the women of Massachusetts, carried through many a campaign of the revolutionary war, and now the property of a descendant of Colonel Burgess, aid-de-camp to General Greene, the hero of the Carolinas. Here are the old camp kettle of the latter, the Mexican hat and gripsack of Zachary Taylor, various mess utensils used in the campaigns of Napoleon, Frederick the great, Andrew Jackson, and Washington. Among the Washington relics is his account with the government written in a well-worn ledger by the father of the republic, and among the rare manuscripts are letters from the royalty of France, the presidents of the United States, its prominent governors and generals. Of the fight at New Orleans there is much to remind us, including the swords of General Jackson and several of his officers, with a draft of the original plan of the battle. There is a portrait of Jefferson Davis, from a photograph taken a few days after his release from Fortress Monroe; and one of Philip

Noland, the hero of Everett Hale's story, *A Man Without a Country*.

The china and silver-ware are much admired, both for their beauty and for the associations connected with them. Among the former is the plate once owned by Rouget de Lisle, the composer of the *Marseillaise*, fashioned at Stoke-on-Trent some ninety years ago, and adorned with a wreath of roses on which are inscribed the chorus notes of the national anthem. The Lowestoft plates, oval in shape, soft blue in color, and with sketches of ancient castles and landscapes upon their faces, are beautiful specimens of ceramic art. Hammered silver-ware of the sixteenth and seventeenth centuries, showing the royalist coat-of-arms; a watch presented by Napoleon to Marshal Ney, with table-ware used in the palace of the emperor and by king Louis Philippe, during his stay in New Orleans, are other articles here displayed. From



LOUISIANA'S COLONIAL EDIFICE

the museum of the capitol came two sofas of antique pattern, curiously carved, their brass panels surmounting massive globular feet. A quaint sideboard, pillared at the back, and a table of artistic design, its legs surmounted by a globe, upon which rests a central shaft supporting the top, are further mementos of Spanish rule. There are also many miscellaneous articles, as carved and decorated ivory, prayer beads of old amber, a medallion painted with religious scenes, a rosary once belonging to a daughter of Louis XVI, a picture of St Louis cathedral executed in 1792, and one of the madonna, found amid the ruins of the great conflagration which, in 1792, almost obliterated the city of New Orleans.

The reception rooms are tastefully furnished with articles supplied by home manufacturers. Finally, woman's influence, especially the feminine taste of the south, as represented in the women of Louisiana, are everywhere apparent, from the galleries and cases of curios, to the kitchen where creole cooks and waiters minister to the physical wants of visitors.

WORLD'S FAIR MISCELLANY.—At the Centennial Exposition several of the states erected buildings for the special use of their citizens; but these were scattered almost at random throughout the grounds; for the idea was a new one, and there was no such coöperation between state and Exposition authorities as at the Columbian Fair. To this was largely due the excellence of the state displays collectively and individually. Each of the state boards felt itself responsible for the good name of the community, stimulating rivalry among intending exhibitors, and often suggesting, arranging, and taking charge of their exhibits. Until the opening of the Fair they acted as a medium of communication between the individual and the general management, and to both were almost indispensable, knowing, as they did, the requirements of state and individual, and how best to afford them adequate representation.

Among other articles in the Massachusetts building, not mentioned in the text, is a table used during the witchcraft persecutions in 1692, and still belonging to a family whose ancestors took part in the movement. On the upper shelf of a ponderous cupboard are two

punch bowls in which liquor was brewed about the year 1700. There is the rush-bottomed chair in which Deacon Phinney sat, more than a century ago, in the old congregational church at Barnstable, and near it is the mahogany cradle in which the children of President Adams' family to the fifth generation were rocked to sleep. A considerable space is devoted to the exhibit of Mount Holyoke college. There are also many curiosities, as pine-tree shillings, one of them bearing the date of 1652, a pair of gold-dust scales, a collection of snuff-boxes, and a huge brass door-lock, ponderous enough for a mediæval fortress. There are the long-skirted coat, the small clothes and knee buckles used by a citizen of pre-revolutionary days, a pair of leather shoes with roses stamped on the toes, worn by some colonial gallant, and the wooden clogs which Massachusetts grandams wore. A tiny cream jug belonging to Susannah Ingersoll was made in 1680, and among dresses is one of brown satin in which Mrs John Quincy Adams sat for her portrait in London, and that in which Mrs Roger Sherman was attired for a dinner given to Washington at Hancock house.

The Mount Vernon residence was in charge of Mrs Lucy Preston Beale, granddaughter of James Preston, one of the late governors of Virginia. Mrs Beale rendered valuable service to the state board of managers, of which she was appointed assistant, preparing, for instance, a stirring address to the women of Virginia, in which she appealed for contributions in the way of exhibits and funds. "At Chicago," she said, "we must measure not only with the women of other states, but of the whole world, in the achievements of industry and originality in both the physical and moral domain. Remember that accordingly our status will be decided, and that henceforth we shall wear the badge of pride or of shame." By Mrs Beale was discovered in the attic of her father's house the counterpart of Washington's bedstead, mentioned in the text, and from one of the family was obtained the counterpane which covers it.

On the day before the dedication of Kentucky's home, the members of her Press association met in the central court to elect their officers for the ensuing year, with the result that Samuel Roberts, of the *Lexington Leader*, was chosen president, I. B. Nall, vice-president, and R. E. Morningstar, secretary and treasurer. All were present at the ceremonies of the following afternoon, and meanwhile made the tour of the Fair, and especially its Mining, Agricultural, and Horticultural departments, of the last of which, its chief, J. M. Samuels, is a native of Kentucky.

In connection with Delaware's participation in the Fair, it may here be mentioned that a liberal state appropriation was made for a display of woman's work in the Woman's building. Especially in this department the state was creditably represented, largely through

the efforts of Mrs J. F. Ball, a member of the national board of lady managers. So also with Texas, whose exhibits in this relation were largely organized by Mrs Rosine Ryan, a member of the executive committee of the board.

In the Louisiana state exhibit, in addition to those already mentioned, are many contributions from the Creole art gallery at New Orleans, whose collections, gathered during 40 years from the homes of her former grandees, include valuable paintings, manuscripts, and relics, with Limoges and Sèvres vases, silver and chinaware, and numerous articles of vertu. There

are the epaulets of Winfield Scott, and the swords of Andrew Jackson, of Nichols, Planché, and Galvez, of Vigne who held rank in the old guard of Napoleon, and commanded a regiment at the battle of New Orleans, and of Commodore Rosseau, one of the heroes of the revolutionary war. Here also is the snuff-box of General Dongelo, a present from Marat; for the two were school-mates, and this was handed to him as a token wherewith he might pass the guards at the bastille, and thus escape the guillotine.



MRS R. RYAN

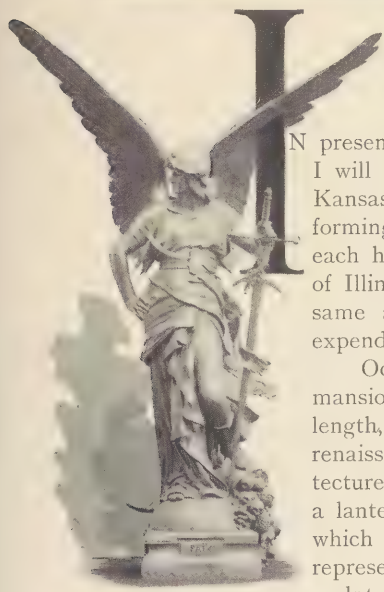






## CHAPTER THE TWENTY-THIRD

### STATE EXHIBITS

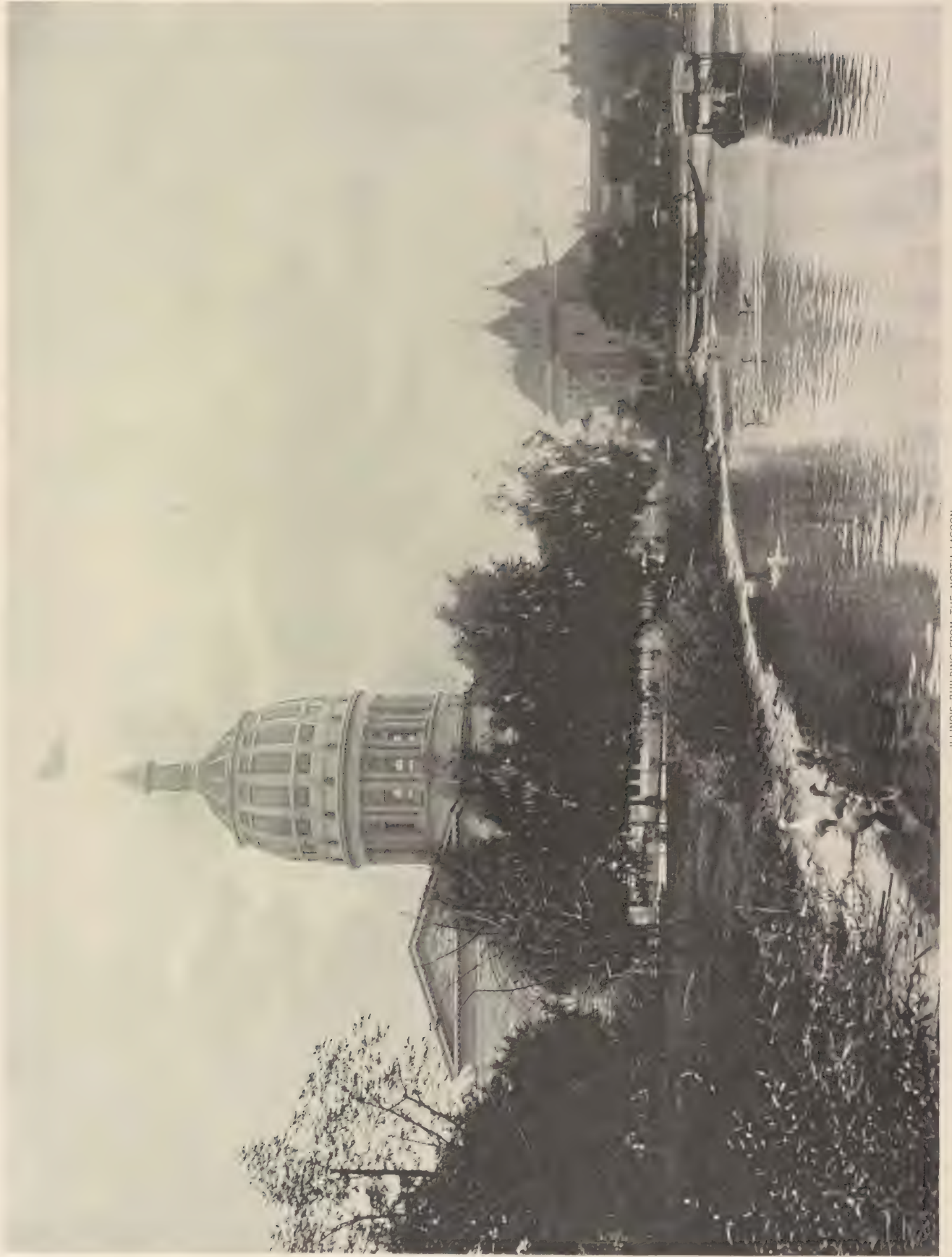


IN presenting to the reader the sectional exhibits of the west and those of the Pacific slope, I will begin with the state of Illinois, whose elaborate display, together with those of Iowa, Kansas, California, Washington, Idaho, and others is among the features of the Exposition, forming, as it were, a fair within a fair, though on a minor scale as compared with what each has to show in the main departments. Of all the state buildings and exhibits those of Illinois are by far the largest, with a floor space of more than three acres, or about the same as in the Woman's building adjacent, costing, moreover, nearly twice the amount expended on the latter.

Occupying one of the choicest sites in the northern portion of the grounds, the Illinois mansion is a cruciform structure, its longer axial line 450 and its shorter axis 285 feet in length, with an average width of nearly 100 feet. The design is suggestive of the Italian renaissance; but with certain points of accentuation that belong to no special order of architecture. From the spot where the arms of the cross intersect, a galleried dome, capped by a lantern, rises some 240 feet above the floor, altogether too lofty and narrow for the building which it surmounts. Above the principal entrance-way is a figure with outstretched arms representing "Illinois Welcoming the Nations," and among other themes expressed in sculptural art are "The Birth of Chicago," "Education," and "La Salle and Companions."

Within is a wide longitudinal nave dividing the exposition sections, with apartments for the governor and his suite, and the state and women's board; in the eastern portion is an elaborate school exhibit; in a memorial chamber on the north, an historic collection from the state capitol, and the western division is devoted to agriculture, horticulture, floriculture, forestry, archæology, and the contributions of the Fish commission and the Geological survey.

The agricultural display is mainly from the state college of Agriculture in conjunction with the government experimental station at Champaign, and was prepared by Professor Morrow, dean of the former. Back from the gallery was erected an ornamental pavilion, in which is a collection of grass seeds, its walls, roof, and ceiling covered with grains and grasses. Near by, in glass jars containing 3,600 specimens and several hundred varieties, are grouped in three sections the principal cereals of Illinois, the ceiling of each, with its supporting pillars, decorated in the grain which it contains. On a mural panel, with framework of yellow corn, is depicted a model prairie farm, its buildings and picket fence, its live-stock and poultry, growing crops and fallow fields, all fashioned of native grains and grasses, and draped with a grass curtain held by a rope and tassels of



ILLINOIS BUILDING FROM THE NORTH LAGOON





ONE OF THE ENTRANCES

In the geological section are pyramids of coal and boulders of granite, limestone, and sandstone, with glacial rock and gravel, glass-sand, fire-clay, and kaolin. Elsewhere is a pyramid of tiles, terra-cotta moldings, and other articles, more than twenty feet square at the base and embellished with floral designs. This is exhibited by the Illinois Brick and Tilemakers' association, and is not only a specimen of ceramic art, but represents an important branch of industry, affording employment to 85,000 operatives. The archaeological collection is from the state museum, and contains many specimens relating to the stone age, gathered from Indian mounds, with others in tribal groupings and arranged with reference to age and utility.

In a projecting space on the northern side of the building are war relics from the state-house at Springfield, with articles of historic interest relating to those to whom was intrusted the safe-keeping of the union. Here are the battle flags of nearly all the Illinois regiments, 155 in number, enrolled for their country's service. Many are rent with shot and shell, and not a few are stained with blood, among them the one that Sergeant Riley bore, and for which he laid down his life

corn. A miniature car, filled each day with different grains, shows how cereals are brought to market and sorted according to grades.

An interesting group from the experimental station is that which demonstrates how forest and fruit trees can be cultivated, cross sections showing their growth in periods of five years, and lateral sections, their grain and fibre. Here also are illustrated the processes of grafting and cross fertilizing, with the treatment of plant diseases and the laboratory equipped for such purposes. Of weeds there is a large collection, and here are arranged all the insects injurious to vegetable life. Horticultural and floricultural specimens are numerous, some in wax and others in their natural state. In a booth formed of interlacing branches of trees is the state display of forestry, rustic benches showing segments cut in various directions, transverse, radial, and oblique. Near the central rotunda is a grotto of artificial rocks, with stalagmites and stalactites, cascades, waterfalls, and rustic bridge. In the pools below are the food and other fish contributed by the commission, including carp, perch, pike, and catfish; black and rock bass; dog-fish, sunfish, buffalo fish, and others in several varieties. Gold-fish, red white and black, occupy a separate pond, and within the grotto are illustrated methods of hatching and propagation.



A MODEL ILLINOIS FARM DEPICTED IN GRAINS AND GRASSES



SIDE VIEW OF ILLINOIS BUILDING



at Ringgold gap. By Sergeant Hunter of Grant's old regiment, the Twenty-first Illinois, are shown the colors which he carried to the front. Here also are the saddle and bridle of General Logan, and the wooden leg of Santa Anna, captured by the Fourth Illinois. Of Lincoln and Grant there are many things to remind us, including the table-cloth used at the wedding breakfast of the former, the dresses worn by his wife on state occasions, and that which she wore at the theatre on the night of her husband's assassination. There is the saddle used by Grant and the lantern which he carried as a part of his outfit, with photographs pertaining to both these central figures of the civil war.

Here and elsewhere are many curiosities gathered from various sections of the state, among them the first bell whose notes were heard in the Mississippi valley, cast, as appears from inscriptions, at Rochelle in 1741, and presented by Louis XV to the mission church at Kaskaskia. Of scenes characteristic of this ancient settlement there are many photographs, including one of the hotel where a banquet was given to Lafayette in 1828. The mantel itself is shown which spanned the capacious fireplace of the dining-room, somewhat the worse for wear after its century and a half of existence. There is a view of the building in which the earlier state legislatures convened, the first brick structure erected west of the Alleghany mountains, with materials brought in boats from Pittsburg. From the grandson of Pierre Minard, the first lieutenant-governor of the state, are some of the articles imported from France to furnish his family mansion—a pier glass, mahogany sideboard, and bedstead with carved posts and canvas canopy. Near by is the table on which Elias Kent drafted the original constitution of Illinois.

The eastern half of the building is almost entirely occupied by the educational exhibits and those of the woman's board. First is the kindergarten display in a cheerful apartment adjoining the vestibule, the children trained under the Froebel system occupying the room for the first three months of the Fair, and then giving place to those of the Chicago association, under whose care are more than a score of free kindergartens in various portions of the city, all supported by voluntary contributions. Then come the public school exhibits, beginning with a model school-room, supplied with the latest inventions in the way of furniture and apparatus, including instruments for the demonstration of problems in chemistry and physics. Next are those of the country schools, the graded schools, and the high schools, all arranged in logical sequence and with numerous samples of work. So with the normal schools in an adjoining section, the specimens shown in cases and grouped according to subjects.

But the feature in this department is the elaborate display of the state university, in connection with which are those of the experimental station and the laboratory of natural history. The educational exhibits proper were arranged by T. J. Burrill, one of the regents, in conjunction with E. E. Chester, state commissioner on education. The literary division is under charge of F. F. Fredericks, and there is also shown the work of the school of art and design. A bacteriological group, with the results of scientific investigations and the instruments used for the purpose, was prepared by Doctor Burrill, a man of more than national repute. By Professor Forbes were arranged the collections in natural history, among which are 300 mounted specimens of birds, including all that are native to Illinois. Many branches of physics and natural science are here represented;



GROTTO, WITH RUSTIC BRIDGE



INDIANA'S PAVILION



C. STUDEBAKER

and there are cases filled with samples and models relating to various branches of engineering, while architecture and mineralogy also find expression, the latter in long rows of labelled crucibles, with the tests for which they were used.

Woman has played well her part in connection with the state exhibit, contributing or gathering many of the most valuable collections, and using to excellent advantage the \$80,000—one-tenth of the entire appropriation—devoted to a representation of the arts and industries of Illinois women. A board was organized, with committees on domestic science, on historic and scientific collections, on literature, on educational, charitable, and professional work, and on art in all its branches, fine, practical, and decorative, musical and dramatic. Thus were culled the choicest specimens of woman's achievement in all the wide sphere of her labors and influence. The exhibits in domestic science, pertaining chiefly to the kitchen, dining-room, and pantry were housed in the Woman's building, where all such contributions are grouped. Of the historic and personal relics, and the articles displayed in the educational sections, and even in the scientific departments of the university, not a few are the offerings of women.

In the library, tastefully equipped and with decorated walls and frieze, are several hundred volumes from the pen of Illinois women, the oldest among them, entitled *Early Engagements*, written by Sarah Marshall Hayden in 1841. Next to this in point of age is *Wau Bun*, a story of early days in the northwest by Mrs John H. Kinzie, published in New York in 1856. There are also many rare and valuable works, with an abundance of newspapers and magazines. By one of the committees a report was published giving, among other information, the number of women wage-earners, of teachers, and of those who are caring for the sick, the poor, the aged, and the defective classes.

The art display includes statuary, paintings in oil and water colors, etchings, and pastels, an entire wall being hung with the collections of the palette club. Of ceramic art and decorative needlework there are many excellent specimens; but as to what has been accomplished by women in the way of decoration, the best examples are in the reception parlor, with its silken hangings of deep olive hue, designed and woven by women, its panelled frieze with allegorical and other paintings by female artists, and its arabesque designs for the





OHIO'S TEMPLE

arches above the windows. The furniture is of itself a work of art, the handsome mantel of carved maple, the old arm-chairs, clock-cases, and escritoirs all fashioned by feminine hands.

Thus it will be seen that in the home of Illinois are reproduced in miniature the main departments of the Fair, in all of which the state was largely represented, the local exhibition forming a complete and well ordered display of her resources, industries, and arts, with all that pertains to the social life of this cultured and prosperous community. No wonder that her people were proud of their fair, of the city which contains it, and of the part which the state has played in contributing to the general effect. Especially was this apparent on days of public celebration, on dedication day, Illinois day, and above all on Chicago day; for on such occasions her citizens unite as the members of a single family, and for a single purpose.



RINGING THE LIBERTY BELL ON OHIO DAY

The building was dedicated on the 18th of May, with the usual exercises held on the plaza in front. On Illinois day, the 24th of August, nearly 300,000 people gathered on the grounds, the largest attendance to that date with the single exception of the 4th of July. Among them were many farmers from the prairie state, here assembled for a few days of sight-seeing, probably the hardest days' work of their lives. The edifice was profusely decorated with flags and streamers, the balconies draped in red, white, and blue, and the interior redolent with floral tributes. There were the usual speech-making, feasting, fireworks, and reception; but the feature of the celebration was the parade of state soldiery, who, marching to the grounds from their encampment at Windsor park, headed by the governor and his staff, passed in divisions some 5,000 strong the reviewing stand erected in front of the building.

But it was for Chicago day that the people of Illinois, and especially its metropolis, reserved their strength, and this was in truth a celebration such as never before was recorded in the annals of international expositions. The date selected was the 9th of October, when in a single night, just twenty-two years before, the city was swept out of existence, now resurrected in tenfold glory, and with the crowning glory of its Fair. The city was crowded with visitors, each incoming train increasing their number, so that on the eve of the great occasion at least 1,000,000 strangers were housed within her gates. But not all were housed; for many there



were with well filled purses who, finding no place to sleep, were compelled to walk the streets, to seek shelter in doorways, unfinished buildings, restaurants, or wherever they could find a resting place.

The morning of the 9th was an ideal autumn day, radiant and bright, the soft, warm breeze of Indian summer caressing with velvet touch the myriads of banners that almost hid from view the towering structures of the midcontinent metropolis. The city was early astir, and all were hastening toward a common goal—the gates of Jackson park. Throughout the entire day, and far into the night, railroads and steamboats were packed to their utmost capacity. The street-cars running to the park were wedged together for scores of blocks, awaiting a chance to move, and on none of them was there a spare inch of seating or standing room, men and women perching on the roofs, crowding on the platform, on the foot-boards, or wherever they could find a foothold. As recorded by the superintendent of admissions 761,942 persons entered the grounds, against 275,000 and 397,000 as the highest figures respectively for the Philadelphia and Paris expositions. For once it must be

confessed that Jackson park was crowded, and the means of communication all insufficient for this unwieldy throng.

The Fair was profusely decorated, and especially the mansion of Illinois, though other state buildings donned their festal robes, the associated boards keeping open house, and in the name of Chicago extending to all a hearty welcome. As to the exercises they were but incidents of the day, the feature of which was the vast, surging multitude assembled in honor of the fête, to bid all hail to a city that many remembered as a black, charred ruin, the commiseration of the world, of which now its Fair was the wonder. At noon the Exposition flag was unfurled in the court of honor above the liberty bell, whose tones



MICHIGAN'S HEADQUARTERS

were presently heard afar in the grounds. Then was presented to its mayor the original deed to the site of Chicago, transferred to the government by the chief of the Pottawatomies. A procession of school children followed, representing various states and cities, a drill of the Chicago hussars, with music and further bell-ringing by the representatives of many nations concluding the programme of the day.

At night there was a procession of floats, at the head of which, one drawn by fourteen coal-black horses contained a female figure, led with silken cords by two other figures, typical of love and liberty. The former was radiant with spangles, on her head a phoenix with outstretched wings, and on her breast, the words "I Will," the motto of the Chicagonese. Elsewhere on the float young women in classic garb, beneath which, let us hope, they wore some warmer and less transparent clothing, represented science, literature, music, and art. Near the central group were a stand of colors and the national coat-of-arms, and around the base of the superstructure were grouped the flags of all nations, beneath it children in Grecian costume, each with a coat-of-arms, symbolic of the forty-four states of the union. The "I Will" float was followed by one named "Chicago in 1812," the date of the Fort Dearborn massacre. Then came "Chicago in War," with others allegorical of "Peace" and "Chicago Prostrate," the latter accompanied by an engine used at the great fire of 1871. At this point the crowd broke in on the procession; for now the display of fireworks was at hand, the remaining floats, those of "Commerce," "Columbus at the Court of Isabella and Ferdinand," and others belonging to foreign participants being excluded from the pageant.

On the morning of the 10th the earlier visitors to Jackson park found there a number who had tarried all night on the grounds, not from choice it is presumed, but to avoid the crush which cost the lives of several

and injured not a few. Far into the morning hours the main avenues leading from the Fair were thronged with serried lines of vehicles in every form, from a four-in-hand to a butcher's cart, bearing homeward their loads of weary sight-seers; yet on this and the following day the attendance for each was more than a third of a million, the largest recorded except for the Chicago celebration. Thus did the people of many states and nations do honor to the city and its fair.



WISCONSIN BUILDING

white oak highly polished, its floors laid in mosaic or encaustic tiling, and among its decorative features are female figures symbolic of agriculture, education, and the Indiana maiden. On the northern side are parlors and reception chambers finished in sycamore and locust. Above are reading rooms, supplied with state papers and the works of native authors, prominent among the latter being several editions of *Ben Hur* and the poems of James Whitcomb Riley. Black walnut and curly maple are mainly used in these portions of the building, the larger rooms containing fireplaces in which Bedford stone is the chief material.

Apart from the building and its furniture Indiana has no individual display, except in the fine and decorative arts, and these intended rather as a portion of the equipment than as exhibits. Among them are several landscapes by native artists, with portraits of prominent men, while in one of the reception rooms is a collection of painted chinaware, the handiwork of the late wife of ex-President Harrison. But even artistic and literary themes are here but slightly represented; for the home of Indiana is intended merely as a pleasant rendezvous and place of entertainment for visitors from that state and those whom they choose to invite.

Dedication day fell on the 15th of June, the feature of the occasion being an impromptu speech from Benjamin Harrison. By B. F. Havens, executive commissioner, the keys were delivered to Clement Studebaker, president of the state board, the former pointing to the portraits of those whose names were linked with the history of the commonwealth, and the latter referring briefly to the tasteful structure now to be opened to the sons and daughters of Indiana. By Governor Matthews the building was dedicated to the youth of the state, and as a member of the woman's board, Mrs Virginia C. Meredith spoke of woman's participation in the Fair. Then J. L. Campbell called attention to the resources and industries of Indiana, one of the largest cereal producing sections of the republic. As to her representation at the Fair, he claimed for his state a foremost rank among the manufactures and educational exhibits, while the most massive exhibit of all was in Chicago's museum of art, constructed entirely of Indiana limestone. After some further exercises, varied with music, a reception in the assembly room brought to a close the celebration of the day.

Of the \$150,000 appropriated by the legislature of Ohio, some \$35,000 was used for the state building, which is of colonial pattern, its main entrance on the east, in the form of a semi-circular colonnaded porch, extending to the upper story. The wood work and tiling are all of native materials, the red tiles used for the roof being a contribution from New Philadelphia. Windows of stained glass bear the names of such men as Chase, Grant, Sheridan, and Sherman, while near the main entrance is a monument surmounted by a graceful figure, symbolic of Ohio, below which upon sub-pedestals are statues of those whom state and nation love to honor. Opening from the main lobby are parlors and committee rooms, and in the centre is a hall decorated

In common with many others, the Indiana building is devoted solely to official and social purposes. It is plainly but neatly built and furnished, the wood, glass, tiling, and stone work forming exhibits of the natural products of the state. Of French-Gothic design, its cathedral windows, its towers and gables, with the spires at either end, give to it the aspect of a chateau of moderate dimensions. The foundation story is of graystone, around which is a broad veranda, simply but tastefully embellished, and over the dormer windows are coats-of-arms in bas-relief. At all points of the compass are entrances leading into tiled hall-ways, one of them opening into a large semi-circular assembly room, connected with corridors by arches ornamented with Gothic fret-work. This chamber, occupying the entire southern section, is finished in



A. L. SMITH



with buckeyes molded in stucco, the coat-of-arms worked in stained glass appearing above its spacious fireplace. Back of the hall is an open court, one of the enclosing wings containing the quarters of the bureau of information, and another a parlor for men, with writing and smoking rooms. On the second floor of the two wings are the assembly hall and a chamber for press correspondents.

Among the portraits displayed in the Ohio building is that of General Sherman, from the brush of Mrs. Ellen Elizabeth King, copied by special request from one in possession of the war department.

It represents the great soldier in full uniform and wearing the insignia of the army of Tennessee and the military division of the Mississippi, the latter including the badges of several corps of which he was the commander.

Though less demonstrative than other states Ohio was not without special days of celebration. In June a reception was tendered to ex-President Harrison, informal but attended by several thousand people. Governor McKinley also received an ovation, and on Ohio day, the 15th of September, the chief executive and his staff were received by the director-general in front of the Administration building, where there was ringing of the liberty bell by the governor, with other exercises that need not here be described.

For Michigan's home, adjoining that of Ohio, a choice location was assigned, west of the Art palace and fronting on two of the boulevards. It is a spacious edifice, with broad verandas on each of its sides, of no special order of architecture, but pleasing in general effect, with framework of pine colored in light gray, dormer windows, and lofty shingled roof, above which a balconied clock-tower rises to a height of 130 feet. On the first floor is the main hall, a bright and cheerful apartment when illumined by electric lights, with bureau of information, check rooms, news-stands and other accommodations. But more attractive apartments are those finished and furnished by Saginaw, Muskegon, and Grand Rapids, the two first in the form of men's reception and reading rooms. The ladies' parlor, the special creation of the latter, is tastefully decorated in stucco and hung with beautiful tapestries designed by the women of that city, while in its furniture the leading factories present their finest products. From Grand Rapids also comes the carved marble mantel in the main corridor, 50 feet in width, the floor, together with those of



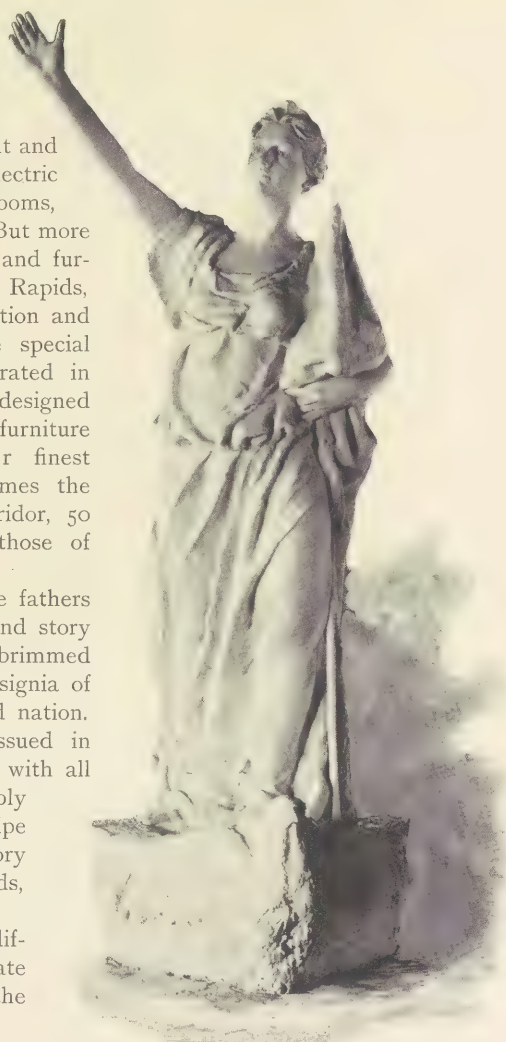
THE GENIUS OF WISCONSIN.  
BY NELLIE MEARS

the minor passages, being paved with Michigan tiling.

In the central corridor is a marble bust of Governor Cass, one of the fathers of the northwest, and at the head of the stairway leading thence to the second story is a portrait of General Custer, attired in nondescript costume, with broad-brimmed hat, sailor shirt, army blouse, and red necktie, loosely covered by the insignia of his rank. Here also are other famous characters in the annals of state and nation. In the room reserved for the press is the last copy of every paper issued in Michigan on the 30th of April, the day before the opening of the Fair, with all subsequent issues printed during its progress. On this floor is an assembly room for social, musical, and religious gatherings, in which is a handsome pipe organ constructed by a Detroit firm. Across the corridor is the natural history collection from the state university, consisting of mounted deer, bears, birds, reptiles, and other specimens of Michigan fauna, past and present.

Michigan day fell on the 13th of September; but as the exercises differed but little from those already described, it is unnecessary here to relate them. Of this and other state celebrations brief mention is made under the heading of World's Fair Miscellany.

Wisconsin's building, with its high, abrupt roofs, turrets, and dormer windows, its body of pressed brick and brown sandstone, resembles rather the home of one of her substantial citizens than a structure intended for public use. Standing on a semi-circular plat of ground, its main front near the lagoon, with Michigan, Indiana, and Ohio for immediate neighbors, it differs from most of the others in that no staff is used in its construction, all the materials being of



FORWARD. BY JEAN POND MINER





MINNESOTA BUILDING

"Forward," Jean Pond Miner, a Wisconsin sculptress, has taken the theme for a marble group executed with singular delicacy and yet with sufficient boldness. In the prow of a boat stands a female figure, one hand uplifted, the other grasping an American flag, the pose suggestive of eager expectation and strength of will. The drapery seems to be carried backward by the wind, as if the craft were approaching land, the eagle which stands on the bow of the boat being recognized as the famous bird, Old Abe, which accompanied its regiment throughout the civil war. Among other works of note are "The Genius of Wisconsin," a quiet composition in marble by Nellie Mears, also a resident of the badger state. Features which largely partake of the artistic are the three handsome fireplaces on the ground floor, and the carved stairway of white oak leading to the chambers above. Midway is a window of stained Venetian glass, a contribution from the city of Superior, and at the head of the staircase are decorated glass panels overlooking the balcony without. On the second story are the rooms occupied by the state board, of which A. L. Smith is president, with an art loan collection, and the exhibit of the State Historical society, including works by Wisconsin authors and a bibliography of writers either native to the state or those who have made their reputation therein.

Opposite the western annex to the Art palace is the clear-cut, two-story structure, built in the style of the Italian renaissance, which represents the state of Minnesota, its frame of wood, covered with staff, and its roof of Spanish tiling. A square portico, with pillars supporting the balcony, is the architectural feature of the main entrance, within the shadow of which stands the muscular figure of Hiawatha, with martial head-gear of feathers, quiver at his back, and tomahawk in belt, bearing

domestic production. Walls and ceilings are finished in polished oak, cherry, birdseye maple, elm, butternut, birch, and other woods from Chippewa county, the wainscoting of the first floor being especially elaborate. Most of the panelling is also in hardwood, and the reception room or lobby, which occupies the entire ground floor, is paved with tiles made of Wisconsin clay by Wisconsin manufacturers. This chamber is divided into three compartments by spandrels of oak, on one of which is the coat-of-arms. The furniture is chiefly of rattan, of the pattern seen at hotels and summer resorts.

Among the pictures are several loaned by General Fairchild, when minister to Spain, including portraits of Columbus and his descendant, the duke of Veragua, of ex-Senator Doolittle and his wife, and of S. Fillmore Bennett. In the reception rooms for men and women are also works of art. From the watchword of the state,



HALL AND STAIRWAYS



across the stream the slender form of Minnehaha, as she passes not unwillingly from the wigwam of her father to that of her future husband. This is a contribution from the women and school children of Minneapolis, due largely to the efforts of Mrs H. F. Brown of that city. The statue, fashioned in plaster, is to be cast in marble and placed in the state park, within sound and sight of the falls of Minnehaha.

Within the building is a bureau of information, with postal and other accommodation. In the exhibition hall are mounted cariboo, moose, deer, bear, foxes, and smaller animals, many of them prepared by R. O. Sweeny of Duluth. There are some noble specimens of elk and moose heads, with a collection of game birds and photographs of famous fishing resorts on northern streams. In this section are several Indian curios, some of them reviving memories of the massacres of early days. Opposite the entrance is the main staircase rising



RECEPTION PARLOR

from the rear of the hall, and about midway there is a semi-circular alcove lighted by windows of stained glass. At the head is worked on another window the coat-of-arms and its motto, "L'Etoile du Nord." Most of the decorative effects, however, are produced by sheaves of wheat and timothy, clover and other grasses, with numerous heads of elk protruding from the walls and antlers interlocked in the form of a chandelier.

The general reception hall and the parlors for men and women are handsomely furnished, and especially worthy of note are the mantel and cabinet in the ladies' reception room. In the decorative scheme of the former the central feature is in the shape of a volume inscribed "Songs of Hiawatha," and near it a calumet, or pipe of peace, across which is a hatchet, a block of polished pipestone more than three feet square furnishing the material for the work. In several of the apartments are tastefully frescoed walls, many of the color decorations being the handiwork of women, while the finishing in pine is executed with pleasing effect.

On the eastern shores of the northwest ponds are the buildings of the two Dakotas, Nebraska standing between them. Each has features of the colonial style of architecture, with broad verandas in front, that of the northern commonwealth with columns extended to the upper story, thus forming porch and balcony. The two divisions of this structure are separated by a broad band or frieze between windows in which wheat, the principal staple of North Dakota, is used for the plan of decoration. The main hall, where are the agricultural exhibits, is entered directly through the principal doorway, and here the embellishments are also in grain, the



NORTH DAKOTA BUILDING

While in the mansion of South Dakota her agricultural resources are freely illustrated, most of the exhibits, together with the structure that contains them, are suggestive rather of her wealth as a mining region. The exterior of the building is finished in Yankton cement, and in front is a semi-circular portico and balcony, a large sandstone arch supported by polished pillars of jasper forming the principal entrance. The parlors are on either side, and beyond is the exhibition hall lighted from the dome above the roof. Opening from the galleries are offices and rooms for the use of the state board and press correspondents.

Among the features of the exhibits are a cabinet of fossils and a collection of paintings by women of Yankton, Sioux Falls, and other cities, with specimens of hand-painted china, and photographs of Dakota's artesian wells. Under the dome is a massive pillar of Sioux Falls jasper, upon which is a gilded globe surmounted by an eagle with outstretched wings. Elsewhere is shown a diamond-like mineral capable of cutting glass, with ores of gold, silver, copper, tin, gypsum, and mica. There is also a large assortment of petrifications, and there are cases filled with stalactites and stalagmites from the Cave of the Wind, in Custer county. Among other curiosities is a model of a cottage constructed from minerals gathered from the Black hills, in the vicinity of Custer city. It is about three feet in height, and of Gothic design, sandstone being worked into the foundation, and the tower at the corner capped with gold and silver quartz. Above the second story are quartzes, stalactites, stalagmites, slate, marble, and various ores, the roof being of mica cut into shapes resembling slabs of slate. This is a contribution from the women of Custer city, and not far away is a model of a farm-house, with yard and outhouses, constructed of varieties of wood gathered from many states.

Of Iowa's home at the Fair a portion was in existence long before ground was broken for the Columbian Exposition. This was in the form of a building called The Shelter, erected on a commanding site near the margin of the lake, a spot well known to habitués of Jackson park. It was a substantial edifice, with granite base, slate roof, and conical towers, the addition conforming to the architectural design and giving to the entire structure the aspect of a French chateau, decorated with flags and streamers. Over the southern front appears the word Iowa; on one of the towers are the names of her leading cities, and on another, medallions and bas-reliefs illustrative of the industries and annals of the state, while on the highest point of one of the roofs the figure of a farmer represents perhaps the most prominent of her wealth-producing classes.

Yellow is the prevailing hue of the walls and decorations, symbolic of one of the greatest corn producing states in the union, her crop approximating and at times exceeding 300,000,000 bushels. In the hall, grain, and especially corn, is exclusively used for its decorative scheme; but this is best described in the words of him to whom the work was intrusted. "We have used," he says, "in decorating this room, 1,200 bushels of

grade of wheat known in the market as "No. 1 hard" being worked into many artistic devices, both in the kernel and the sheaf. Varieties of nutritive grasses, to the number of about four-score, are also used in the formation of panels and the depicting of cattle, agricultural machinery, and farm scenes. To the wealth of the state as a producer of wheat further attention is called by a large painting from the brush of Carl Guthertz, representing a farm in the Red River valley.

In the second story are reception parlors and rooms for the members of the press and the state commission. Here are specimens of decorated china and other forms of woman's handicraft. By women also was contributed the old-fashioned cart in which was brought to Pembina the bride of the pioneer settler of North Dakota, attached to it an ox so mounted that he still appears to be dragging his precious burden. Here likewise are moose, deer, and buffalo, all of them in the best style of the taxidermist's art.



INTERIOR VIEW



corn and three and one half carloads of cereals. The capitals of the columns are worked out in corn shucks and millet heads. From the roof-tree to the walls the ceiling is divided into three sections, the top one being general in design and made of all the field products of the state. The next section has fourteen panels, those on the side ceiling containing figures illustrating the different industries of the state. At each end of the ceiling are panels containing the American eagle and shield worked out in grains, and in the four corners of the ceiling are shields with the device, "Iowa, 1846-1893," worked out on a blue field in white corn and shucks. Where the pillars join the roof is a frieze, with an elaborate scroll-work made of festoons of corn and wheat and millet seeds. In the centre of the hall is a model of the state capitol, made entirely of glass and filled with grain. It is 21 feet high, 23 feet long, and 13 feet wide. Facing the eastern entrance is a heroic group, the centre figure being a woman. It represents Iowa fostering her industries. Grouped around by the pillars are small pavilions and pagodas, on which are displayed the different products of the farm and mine."



SOUTH DAKOTA BUILDING



MINERALS AND GRAINS OF SOUTH DAKOTA

From the rear of the hall-way a broad flight of stairs leads to the assembly and other rooms above, the ground floor of this, the new portion of the building, containing reception parlors, offices, and headquarters for the state board and its committees. Opposite the landing of this stairway is a huge fireplace, upon the mantel of which is the inscription: "IOWA—The affections of her people, like the rivers of her borders, flow to an inseparable union." Passing into the assembly chamber, the visitor finds its walls hung with native works of art, the feminine industries which border upon art being also here displayed. Opening from the hall is a parlor for women, its frieze and panels containing floral and other tasteful designs. For men there are general reception rooms and special



IOWA'S "SHELTER" BY THE LAKE

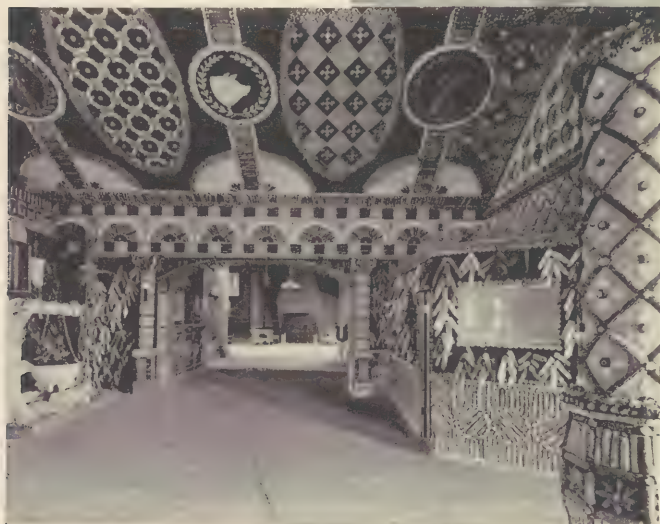
apartments for smoking and writing, while for the press are reserved two handsome chambers, one of them adorned with figures symbolic of the fraternity. Newsboys are shown in eager pursuit of customers; the printer's devil appears, and there are bas-reliefs of shears, paste-pots, and other implements of the craft. In the other chamber are newspapers, desks, and all journalistic equipments, including telegraph service. Finally, connected with the assembly hall is a room in which is installed the exhibit of the State Historical society.

As agriculture is the foundation of Nebraska's wealth, it is fitting that her exposition hall should be well stored with specimens of grain and other products of the soil. These are for the most part arranged by counties, a map of Platte, one of the richest of them being fashioned of wheat, oats, rye, and grass seed. But that which attracts most attention is the exhibit of beet-sugar industries, in which for several years the state has been largely engaged. These are displayed in photographic form, and in the centre of the hall is a pyramid composed of jars in the contents of which are shown the various stages of growth and manufacture, from the seed to the full-grown beet, and from pulp and juice to syrup and granulated sugar. After studying this exhibit, together with the ornamental display of golden grain on wall and frieze, the visitor takes no exception to the mottoes worked in native grasses, "Corn is King," "Sugar is Queen." In rear of the exhibition chamber is a room curtained off from the main floor, in which a woman who claims to be "the greatest butter artist in the world" gives daily exhibitions of her skill in moulding. Here, with paddles, sticks, and other simple implements, she fashions from this plastic material the seal and arms of the state, together with fruits and grains, floral and other designs.

The building itself is of the later colonial style, with massive columns and spacious portico approached by broad flights of steps, and with the seal of Nebraska boldly executed on the architrave. On the ground floor are accommodations for the state board, a post-office, and a parlor for men, a double stairway leading to the rooms above. On the second story are several handsome apartments, with an art exhibit and a collection of all the more prominent newspapers published throughout the state. In one of the rooms, completely furnished by Nebraska women, is a display of decorated china, paintings on plaques, artificial flowers, fancy needlework, and other evidences of feminine skill and taste. The Indian tepee and the buffalo, which also form a portion of the exhibits, are but memories of an age, not many years distant, when Nebraska was still in the grasp of the savage, and when herds of bison roamed over one of the most fertile regions of the west.



"Ad Astra per Aspera" is an ambitious watchword for individual or state, but one that is fully justified in the history of Kansas. In Exposition affairs she has evinced all the typical western vigor, her building itself being among the largest and most attractive on the grounds. It is cruciform in shape, nearly 140 feet in either direction, and of unique and substantial design. A broad arch forms the main entrance, a large, tower-like projection, surmounted by a cupola, forming the point of architectural emphasis. In bas-relief upon



DESIGNS AND DECORATIONS, IOWA BUILDING

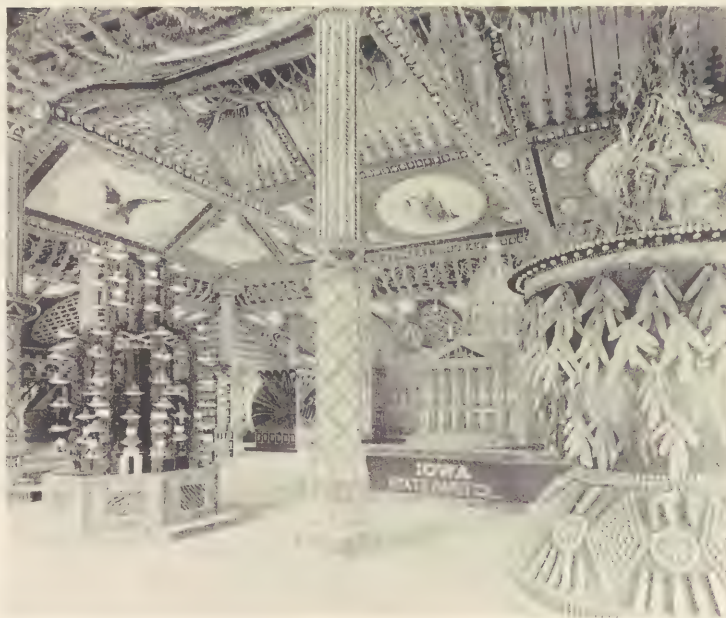
the walls of this projection is the seal of the state, with its star-like motto placed within the rim of a medallion, and flanked on either side by seraphim with broad-spread wings. Above the main body of the structure is a glass dome, elliptical in shape and bearing upon its interior surface the watchword of the state in letters of gold wrought on a star-lit sky. On the main floor are sheaves of wheat, stalks of corn, and other native products, the cobs being cut into sections and grains and grasses fashioned into mounds, ornamental cornice work, dados, and wall bases. In another section are arranged the fruits and vegetables of Kansas, all of excellent quality, and especially her apples, beets, and melons.

In the second story the decorative features are mainly the handiwork of women. The exhibition hall is beneath the dome, and around it are parlors neatly furnished and with paintings by local artists. Of the mural decorations the most pleasing are those in which the golden face of the sunflower is repeated, while banners hung upon the walls present sheaves of such grains as are raised to advantage in special localities. One of these chambers was furnished by Jewell county, which claims to excel in production of corn; but here the state flower still asserts itself, even in the carvings of the easy chairs. Elsewhere are special exhibits of woman's industrial art, with one representing the public school system of Kansas.

But the feature of the display, and in truth one of the features of the entire Exposition, is the collection of specimens in natural history, arranged in artistic groups in an annex erected for the purpose. Contributed by the university of Kansas, this collection was mainly gathered and prepared

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CEREALS AND FRUITS



by its custodian, Lewis Lindsay Dyche, for several years professor of zoölogy and curator of birds and mammals. To secure these 120 specimens was a ten years' labor of love, and to mount them, even with the aid of skilled assistants, was the task of four additional years, the professor travelling far into the mountainous regions on the northern verge of British Columbia, and elsewhere venturing where never before white man had ventured. Among these groups are many animals which are rapidly becoming extinct—the moose, the elk, the Rocky Mountain sheep, and others of which, a few years hence, not a single specimen will remain alive. An additional value is imparted by the skill of the taxidermist who, in addition to a perfect mastery of his art, is also a naturalist, one who has studied his subjects, not in cages, but in forest lair and on mountain slope, has reproduced them in their natural habitat and with their natural environment, as they crouch or walk or leap, even to the rigid tendons, the swelling muscles, the look of fear or pain or defiance with which they yield their



THE NEBRASKA BUILDING

life. In a word, the Kansas collection is rather an exhibit of animal sculpture than of taxidermy, bringing that science into close relation with plastic art.

In front of the collection is a pair of bull moose, fighting as only moose can fight when each one struggles for the supremacy. Admirably are here portrayed the fury of the combat, the tension of limb, and contraction of muscle, this group holding in taxidermal science the place accorded to Landseer's famous painting of forest monarchs engaged in a duel to the death. Near by are mountain lions quarrelling over the carcass of a deer, and close at hand is a lioness with cubs not larger than kittens. Next is a cluster of foxes, among them a silver fox whose fur is valued at \$150; and then a pair of ocelots or tiger cats, with lynxes in life-like posture. Wolves are tearing at the remains of a buffalo, of which little is left for a group of coyotes awaiting their share of the feast. Three young coyotes are faring better, one having secured the tail of a rabbit, and the others tearing the body apart. Close to the wall is a group of buffalo, one of them, as is claimed, the largest and best mounted specimen on exhibition anywhere in the world.

At the head of a band of elk stands a magnificent Wapiti bull, measuring ten feet nine inches from tip of toe to point of antler, the poise and contour perfectly reproduced, and in the head and face an air of conscious superiority. This was killed in Colorado in 1890, and in common with most of the specimens met his fate at the hands of the professor. In close proximity is a band of antelope of a variety seldom met with in haunts accessible to man, and in a miniature cañon in the background are two grizzly bears, one of them facing the spectator. On a rocky promontory in line with the cañon are ten Rocky Mountain sheep, this by far the best collection extant of a species rapidly becoming extinct. On the topmost crag the leader keeps watch and ward, a veritable king of the big horns, of phenomenal stature but perfect in shape and color. On another peak are Rocky Mountain goats, a ram with six ewes and young bucks, the former standing guard and the others grouped below in realistic attitudes.

But the most imposing group in the collection is a family of seven moose, arranged as though in the swamp lands near the lake of the Woods, where all the animals were killed. At their head is an enormous



bull, a leviathan of his kind, with a measurement of more than nine feet from toe to antler and seven to the top of the withers. On rocky, moss-covered ground near by are caribou, and near the moose are Virginia deer feeding on a grassy slope. Of mule deer there is a herd of nine, in front, a noble buck, and all in natural shape

and posture, as in their mountain home. In addition to these is a score of heads all handsomely mounted, and of smaller animals there is a liberal display, from wolverines to jack-rabbits and prairie dogs. The entire exhibit is arranged in panoramic form, with artificial groundwork, in places twenty feet high, and so constructed as to represent, as far as possible, the natural habitat of all the species.



THE KANSAS BUILDING

to such advantage is due in part to the liberal appropriation of her legislature, largely increased by the subscriptions of counties and individuals, and amounting in all to \$750,000. But here also were the materials for a choice and elaborate display; for in few sections of the republic is there a greater diversity of products, and in few have greater results been achieved in all the more prominent branches of industry.

California's edifice is a reproduction of the mission buildings of her golden age, the era that preceded the age of gold, when Franciscan padres dozed away their harmless lives, and amid peace and plenty ate and drank of the products of the soil planted and garnered by their neophytes. It is a composite design, the exterior resembling those of the Santa Barbara and San Luis Obispo missions, with traces of that which Junipero Serra founded at San Diego, far back in the eighteenth century. Unless it be for the belfries, the central dome, and roof garden, there is little attempt at external decoration, while in the interior the spacious nave and intersecting aisles impart a church-like aspect, and also afford ample room for exhibits. Erected as it is on one of the choicest locations in the park, this antique structure, with its massive walls of adobe and roof of Spanish tiles, is one of the landmarks of the Fair; but while not without elements of the picturesque, it would seem that a more appropriate design could have been selected for the display of mineral specimens, of fruits and cereals fresh gathered from the rich soil of the golden state.

As to the decorative scheme may first be mentioned the seal of the commonwealth above the principal

Turning to the exhibits of the Pacific states may first be mentioned those of California, which in her own, as in the main departments of the Fair, is represented as befits this enterprising and ambitious commonwealth of the furthest west. Of her contributions to the latter, and especially to the Mining, Agricultural and Horticultural divisions, sufficient mention has been made, and many of these are duplicated, or rather supplemented, in her home at Jackson park. That the state appears



A SUNFLOWER ROOM

entrance-way, and on either side an inscription referring to the admission of California into the union. Within the portal is a colossal statue of California, with girdle of gold, bearing in her right hand the olive branch of peace, and at her feet a cornucopia filled with fruits. In the southern gallery a large canvas illustrates the process of placer mining in pioneer days, and this is flanked by models of primitive mining implements, wrought in pine cones and cedar. Opposite is depicted a farming scene, adjoining which are farm products and utensils, other paintings in the northern gallery and elsewhere representing the flora of the state and her production of wine. Thus are symbolized the several industrial eras; first the mining era which succeeded the pastoral age; then agriculture which gradually supplanted mining as the leading industry, this in turn giving place to horticulture and the making of wine. The balustrade which encircles the rotunda on the second floor



GROUP OF BUFFALO, KANSAS EXHIBIT

is adorned with branches of oak, manzanita, and pine, from which depend mosses and ferns, the posts extending thence to the summit of the dome wreathed with the foliage of palms. Pendent from arches and beams are baskets filled with semi-tropical plants.

In connection with the decorative features may also be mentioned the *eschscholtzia* and wild flower rooms, adjoining each other in the gallery and separated only by portières, one of them made of sixteenth century cloth, bordered with poppies and with fringe of gold. In the *eschscholtzia* chamber, so-called after the plant which bears the name of Eschscholtz, the botanist, the design is everywhere suggestive of the wild poppy, the flower of California. The decorations are in white and gold, and the canvas ceiling is stretched on frames and adorned with wreaths and garlands of poppies, in the centre of each being name of one of the counties. On the horizontal portion of the ceiling is a panel representing a comely damsel, ruddy of hue and with flowing auburn tresses, scattering the golden poppy broadcast over the land. In the wild flower room, the floral wealth of the state is depicted in a number of water colors executed by Mrs Marianne Matthieu, a San Franciscan artist. The walls and ceiling are draped in olive-green silk, and of the same color are the draperies of brocaded satin fringed with gold. Pressed flowers are displayed in a cabinet, and ferns on a pedestal of marble and in a vase set on a rustic stand, a handsome specimen of ceramic art.

Unlike the majority of the state edifices, California's domicile is not merely a club-house or place of rest and social intercourse for visitors, stored with historic and personal relics. While serving for these and other purposes, it is also an exposition building, and if, as I have said, some of its exhibits are duplicates, they are





AMERICAN LIONESS AND FAMILY

such as will bear duplication; for here is represented a state which ranks among the foremost of the sisterhood in the production of cereals and fruits, supplying, since 1848, more than two-thirds of the total yield of gold, and with manufacturing and other industries yet almost in their infancy, but capable of infinite development.

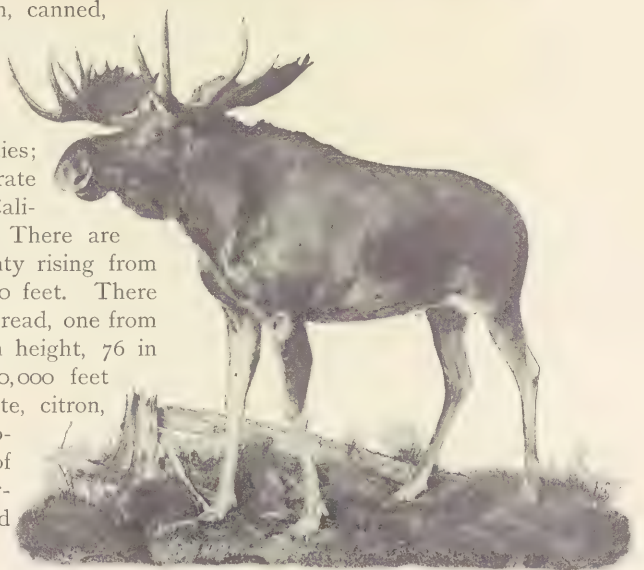
The collections are from many counties, and are classified under the general departments of mining, agriculture, horticulture, and viticulture; but include also exhibits of forestry, fisheries, fauna, and flora, with such as pertain to the arts and to education. In the mining display are nearly all the metals and minerals of commercial value found in California, among them gold, silver, and nickel; lead, tin, copper, antimony, aluminum, and iron; sulphur and salt; gypsum and kaolin; asphalt, borax, and petroleum. Of farm and market-garden products there are wheat, oats, barley, maize, broom and Egyptian corn, honey and sorghum; pumpkins, squashes, and beets; Irish and sweet potatoes; beans of thirty descriptions;



A COMBAT TO THE DEATH

tomatoes, onions, cabbages, carrots, and turnips. Fruits, fresh, canned, and dried, crystallized and preserved, are here in every species and form. There are oranges, lemons, and limes; apples, quinces, and pears; peaches, plums, and nectarines; figs, prunes, and dates; olives, cherries, and bananas, with berries and currants of many kinds, and grapes and raisins in scores of varieties; of jellies and marmalades, wines and brandies, there is an elaborate display; and of nuts there are the English, Eastern, and California walnut, with chestnuts, pecans, peanuts, and almonds. There are palm-trees a century old, a specimen from Santa Barbara county rising from a Spanish fountain in the centre of the dome to a height of 60 feet. There are sections of the giant redwoods of which all the world has read, one from Humboldt county hollowed from a tree more than 400 feet in height, 76 in circumference near the ground, and containing, it is said, 400,000 feet of lumber. Finally, there are miniature groves of orange, date, citron, lemon, lime, cocoanut, guava, and loquat trees, with sub-tropical plants arranged in artistic groupings. By many of the counties exhibits of their products and resources were arranged in separate sections, some of them containing choice and varied collections.

As to special features may first be mentioned the heroic



A MONARCH OF THE FOREST



statue in bronze of James W. Marshall, the discoverer of gold, at the base of which are cases of nuggets and other specimens, and around it larger cases of minerals and ores. Here and elsewhere are more than 6,000 samples of metals and minerals, contributed from all the more prominent mining properties. In the section devoted to southern California is the "Palace of Plenty," a cruciform structure fashioned of the products of

southern counties. In glass cases around its base are 40 kinds of grain, and near it a display of English walnuts in a revolving tower of glass, silver lined and octagonal in shape, adjoining which is a large globular structure entirely covered with oranges. Not far away is a pyramid of fruit, 16 feet in height, and surmounted by the figure of a bear. Santa Barbara county has a tower of olive oil, 30 feet high, its frame of iron, its apex of pampas plumes, and on the shelves, 1,600 bottles or nearly two tons of oil. Santa Clara county has an exhibit of prunes wrought in the shape of a horse, and Humboldt, a bear cave, with a fierce looking brute at its mouth. Ventura shows a pagoda constructed of beans; San Diego, a portière of silk cocoons, and Fresno a miniature temple of redwood roofed with stalks of grain and pampas plumes. Kern county's structure is in the form of a bridge, on the top and sides of which are arranged in glass jars her cereals, fruits, and cotton, while beneath the span is a collection of minerals. The base of the bridge rests on two globes labelled "Orient" and "Occi-



GROUP OF CARIBOU

dent," and thus is suggested her world-wide range of products. Under the western gallery the chamber of commerce has an elaborate display of grains from several counties, of citrus fruits from Riverside, Los Angeles, and San Bernardino, and of wines from the largest cellars in California, containing about one half of the aggregate production of the United States.

In the art gallery are contributions from the foremost of California artists, such men as Thomas Hill, William Keith, Norton Bush, and Virgil Williams. Women are also largely represented, with a dozen or more exhibitors. Not a few of the works are loans from private collections, and of all that were submitted to the committee less than one third were accepted. Here also is an exhibit of the arts and industries of women, among which are included music and literature. For this purpose a large and handsomely furnished chamber was prepared, with partitions of carved redwood, and in the corners, spaces filled with divans. At



MOOSE FROM THE SWAMP LANDS

the entrance is a golden gate, designed by Mrs Vance Cheney and fashioned of large gilded leaves, above which are rugged trunks of trees adorned with foliage and fruits, all worked in tints of gold and gold-bearing quartz.





CALIFORNIA BUILDING

On one of the walls are portraits of California musicians, and near them the works of composers, with Hawaiian, Indian, Japanese, and Chinese instruments hung on panels in each of the corners. Elsewhere, in bookcases of carved native woods, are contributions from California authors, some of them of more than local celebrity. There are also shelves containing painted china and pottery, and there are panels on which are fire etchings and poker work, with designs in brass and iron, embroidery, needlework, and other articles fashioned by the deft fingers of California women.

In the historical display are many mission and Indian relics, the former freely contributed by those in charge of the collections gathered by the Franciscan fathers. From the Los Angeles school of art and from Santa Fé are paintings and photographs of the missions, and of men who have played a prominent part in the annals of the state. Kern, Butte, and Chico counties send a large number of Indian baskets and curios, and in this connection may be mentioned the pictures of Alaskan scenery, including the Muir and Taku glaciers, Juneau, and an ocean view from Sitka, these the property of the Pacific Coast Steamship company. Wells, Fargo

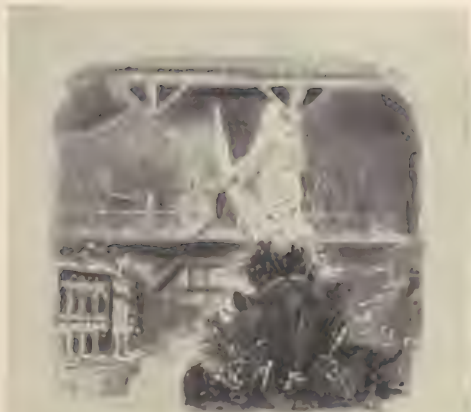


PORTICO OF CALIFORNIA BUILDING

and company have also an historical collection, with portraits of the presidents and other officials of this famous express and banking association, from Henry Wells and William G. Fargo, its founders, to John J. Valentine, elected president as successor to Lloyd Tevis in 1892. There are also the portraits of agents of the company who have manfully resisted the attacks of highwaymen, with broken treasure boxes and other articles from plundered stages and trains. For the fourteen years ending with November 1884, there were no less than 313 actual and 34 attempted stage robberies, the loss from these and train robberies exceeding \$927,000. Since that date no general report has been made; but, as the company remarks, "this has not been due to dearth of material." George D. Roberts is here, George Hackett, Aaron Ross, Hank Monk, and other celebrities. There is the oldest railroad pass in existence, granted in 1836 to W. C. Gray, then in charge of the express traffic on the Boston and Lowell line. There are signs more than half a century old; there are posters offering large rewards for the apprehension of desperadoes; there are the stamps used by the Pony express, and finally there is the double-barrelled shot-gun with which, as his only weapon, "Black Bart" played the rôle of the lone highwayman.

By the San Francisco board of directors was prepared, in the form of a circular relief map, a panoramic outline of the city, its bay, and the shores adjacent. The model is more than 100 feet in circumference and seven in height; but depressed beneath the level of the floor so as to afford a perfect birds-eye view. All the principal streets and buildings are shown, with railroads, park, and plazas, on the scale of one square foot to the block, and thoroughfares two inches in width. Among the objects of this exhibit was to show the geographical and other advantages of San Francisco, as the western gateway of the nation, and with one of the finest harbors in the world.





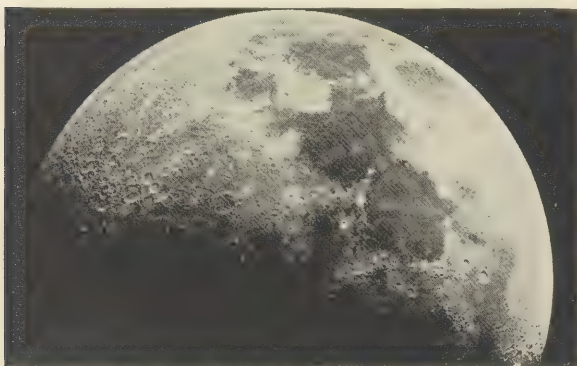
SECTIONAL VIEWS IN CALIFORNIA BUILDING





ONE OF THE ENTRANCE WAYS

in the main departments of the Fair, and especially in the Mining divisions, I have called attention in other sections of this work. For her home at Jackson park a choice location was allotted, near one of the principal entrances, this being accorded, as explained by the director-general, on account of her liberal appropriation, and her prompt



THE MOON IN THE FOCUS OF THE GREAT EQUATORIAL, LICK OBSERVATORY

Still another special exhibit is the collection of astronomical photographs illustrating the work of the Lick observatory in the space allotted to Santa Clara county, where, near the summit of Mount Hamilton, more than 4,000 feet above the sea-level, is the site of this well known institution. Of these, three specimens are here reproduced, the one representing the total solar eclipse of 1893 being a copy of a photograph taken in Chile by the members of an expedition specially despatched for the purpose. Among other valuable work accomplished by the observatory, of which E. S. Holden is director, are the observations of the transit of Mercury in 1881, of the transit of Venus in 1882, and the discovery and measurement of a large number of double stars.

Second to California's elaborate display, and second only, is that of Washington, one of the youngest and most vigorous among the Pacific coast sisterhood. To her rich and multifarious resources, and to her thriving industries, as exemplified Agricultural, Horticultural, Forestry, Fisheries, and

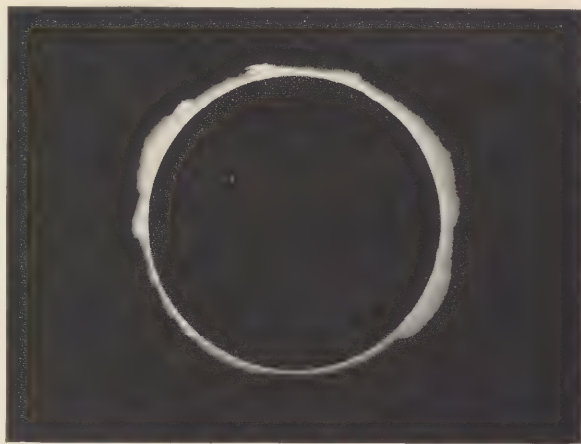


THE LUNAR APENNINES

application for space on which to erect a separate building, the first one received on all the list.

Of the forest and mineral wealth of Washington there is an excellent illustration in the building itself, the materials for which were collected and shipped from her logging camps, quarries, and factories at considerable expense of time and money, and with results that speak for themselves. Nearly all the materials; not only the lumber, logs, and stone, but the doors, window-frames, and sashes; the moldings, panellings, and wainscoting, the stairs and railings were contributed by her citizens; for nowhere was displayed a more general interest in the great World's Fair, and a more worthy ambition that the state should be well represented.

The Washington edifice cannot be readily mistaken; for it is unique and characteristic in appearance, and in front of it is one of the tallest flag-staffs in the world, 238 feet in height, and cut from the fir-tree forests that encircle Puget sound. For the plan competition was invited from architects resident in the state, the one selected by the director of works, to whom were submitted the prize drawings, being that of Warren P. Skillings, who thus became the artificer of the building. The foundations and lower walls are of fir logs, some of them



THE TOTAL SOLAR ECLIPSE OF APRIL, 1893



127 feet long, eight in diameter, and yet so cut away that the timber squared from the surface of each would suffice to build a roomy cottage. The roof is shingled, and supported by massive timber trusses, and the interior finished in cedar and fir; all the materials used coming from the evergreen state, even to the nails and the paint. The first floor is almost absorbed by the central hall, and on the second story is a reception chamber, with parlors and committee rooms. In the wings are grouped the principal exhibits, one of them having a solid concrete floor, on which are arranged the mineral collections. Of the two main entrances, the one facing the lagoon is constructed of carved building stones, and the other, fronting on the grounds, of ores with veins of silver, lead, and various metals, with mosses and vines in the crevices.



THE WASHINGTON BUILDING

a train of freight cars issuing from the tunnel of a mine; a saw-mill, with operatives at work, and a farm with harvesters in the grain fields and a large cornucopia from which are pouring the fruits of the earth.

Entering at the south wing the visitor is confronted with great sections of fir, spruce, cedar, oak, and maple, from the timber regions of Puget sound, some of them the full diameter of the trees, and others displaying the finish they will take. A huge fir stump has a cedar log entangled in its roots, thus showing that the fir has grown above the cedar, and as the latter is perfectly sound, and the former at least two centuries old, we have here sufficient proof of the durability of Washington timber. In this section are also rolls of wrapping paper made from the pulp of the fir and cottonwood. Among other manufactures are wooden vessels, shingles, and lumber in various forms. Near by is the mining and mineral exhibit, mainly of gold, silver, lead, onyx, coal, iron, copper, asbestos, mineral paint, and building stones. Here is a block of coal from the Rosslyn mine, weighing more than 25 tons, and probably the largest that was ever mined in a single piece.

Connecting the southern wing with the body of the building is a corridor neatly draped with cereals and fruits, the former in sheaf and wondrous large. On the ground floor of the main structure is a model farm in miniature, with houses, barns, and fences; fields in summer fallow, with tiny gang ploughs at work, and all the machinery and implements represented on a diminutive scale. Here also are mounted specimens of the fauna of Washington, her elk, deer, and bear; her seals and sea-fowl; her silver salmon, her mountain trout, and other varieties of fish, with the skeleton of a mammoth elephant, thirteen feet high and with tusks nearly ten feet in length. Thence to the north wing leads another corridor where is a display of garden vegetables—cabbages, beets, potatoes, onions, parsnips, and turnips of phenomenal size and yet of excellent quality.

In the northern wing are the educational and art exhibits, with a collection of woman's work, including needlework, lace-making, embroidery, and panel-paintings. The school buildings and systems of Seattle, Tacoma, Spokane, and other cities are shown in photographic form, with the pupils at their studies or exercises, and there are numerous specimens of chirography, drawing, and drafting. In the art display are excellent paintings in oil and water colors, all of local subjects and by Washington artists. In photographs are also views of the homes and business structures of Tacoma, whose site, a dozen years ago, was little better than a wilderness of forest primeval, and where now are business blocks and residences worthy of a city of metropolitan rank.

The building is plainly furnished, and with a view to display the exhibits to the best advantage. As to decorative features, there is first of all the seal of the state carved from native woods, the centre of spruce, with stars made of quaking asp surrounding the head of Washington, whose features are fashioned of madroña, his wig of elderberry, his coat of black cedar, and his ruff of mountain pine. Among the decorated panellings are those which display the rhododendron, or state flower, carved on white maple; a bunch of grapes on cottonwood, of strawberries on tinted pink maple, and a spray of hops on native oak. On larger panels carved in birch are shipping, mining, lumbering, and farming scenes, with a vessel loading grain at the wharf;



WOMAN'S EDUCATIONAL EXHIBIT

Ascending to the upper floor the visitor is entertained by cultured men and women, in apartments handsomely furnished, and with no lack of the hospitality characteristic of the evergreen state. Especially was this apparent on the day selected for celebration, for which the simple exercises were arranged by the state commission, with N. G. Blalock as president.

Idaho's representation at the Fair is largely due to her commissioner, James M. Wells, the only one appointed for that state. Through his persistent and well directed efforts, a region rich in resources and possibilities, but before comparatively



N. G. BLALOCK



MINIATURE FARM, WASHINGTON

unknown, has taken rank at the great Exposition with many of the older and more populous sections. The state building, one of the most unique and original structures in Jackson park, is a modified form of a Swiss chalet, built of logs of uniform thickness on a foundation of lava rock, these and all other materials of home production. The logs are rough hewn and represent more than twenty varieties of timber which grow in the forests of Idaho, among them, pine, fir, cottonwood, aspen, cedar, tamarack, hem-

lock, alder, yew, thorn, and willow. In front of the edifice, beneath its overhanging eaves, is the seal of the state cut in stone, and over the shield of the commonwealth, a mounted specimen of a stag. The entrance is in the form of a rude archway of lava rock, and a wainscoting of minerals is a feature of the hall-way, the offices opening from them being finished in fir, cedar, tamarack, and pine. The outer doors are composed of mica instead of glass, thus calling attention to a mineral found only in Idaho and North Carolina in deposits of commercial value. The fireplaces are made of white marble, basaltic rock, and pressed brick, the last representing a recent but promising industry. In pictorial form are illustrated here and there the scenery and characteristic flora of the state.

On the second floor are reception rooms, separated transversely by what is known as Mica hall, its doors and windows fashioned of blocks and sheets of mica and with wainscoting of the same material. The parlor for men is furnished as an old-time hunter's lodge, with fireplace of native marble, three-pronged andirons resembling bear traps, and on the walls various trophies of the chase.



MAIN HALL OF WASHINGTON BUILDING



Mounted deer, elk, caribou, and sheep are picturesquely grouped, and here is also a cougar slain by the knife of a noted huntsman. Above the fireplace is the rifle of the Modoc chief, Captain Jack, and among other articles are Indian relics and costumes of brilliant hues. The doors of the lodge are of hewn oak, the hinges and fastenings in the form of dirks, flasks, arrows, pistols, and other weapons and implements. Elsewhere in the building the bracings and hinges of the doors, most of which are made of a single slab of timber, are in imitation of miners' tools. In the women's parlor are a mantel of white marble, homespun carpet, and tea-set arranged on an oaken sideboard. Old-fashioned candlesticks are fastened to the rough-hewn logs, where also hang Indian baskets and fabrics, while vegetables, corn, and tobacco speak of the domestic products of the state.



MRS. M'ADOW



IDAHO'S CHALET

On the third floor is the exhibition chamber, about 50 feet square, in which is an elaborate display of cereals, with hundreds of jars of fruit and a complete herbarium of flowers and grasses. Here also is an exhibit of taxidermy, including members of the deer family with bears and wolves, all in life-like attitudes. The rarest specimen among them is of a black wolf, which appears with a rabbit in its mouth, amid what appears to be a patch of sagebrush. In a glass case is a collection of more than 100 varieties of birds indigenous to the state.

In the collection and organization of Montana's



J. M. WELLS

exhibits woman plays a prominent part, and a liberal share of the appropriation was set aside for her use, five lady managers having charge of all matters pertaining to dairy products, poultry, pantry stores, needle-work, floriculture, and such of the fine arts, plastic and ornamental, as are the products of woman's hands. The president of the woman's branch is Mrs. J. E. Rickards, wife of the governor, with Mrs. Clara L. M'Adow as associate, Stephen De Wolf being at the head of the board.

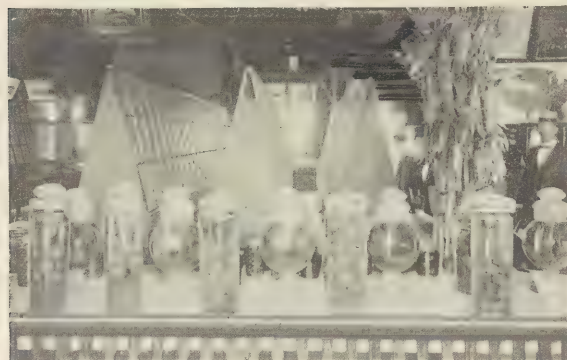
The state building is a one-story structure of Romanesque design, its arched vestibule with marble floor, in front of which is a trophy of precious ores, surmounted by a lordly elk. On one of the panels at the side is the state motto, "Oro y Plata," and on the other the inscription, "A. D., MDCCCXCIII." Within are parlors and a general reception room in the form of a rotunda, the architectural feature of the interior being its heavy Roman pilasters with massive caps and bases. The rotunda, which is



THE HUNTER'S CABIN



NATIVE ANIMALS AND SHEAF GRAINS



CEREALS AND FRUITS

of nearly 100 feet. The color scheme is in ivory white, and the decorations, though not elaborate, are sufficient to relieve the broad, plain surface of the walls. Passing through portals 40 feet in width, the visitor enters the central hall, whence stairways lead to the floor above. At the end of the hall is a large mantel of onyx, flanked by glass doors opening into the offices, and on the sides are smoking and reception chambers. On the second story an assembly room, with vaulted ceiling, extends across the centre of the building, and adjoining it are reading and writing rooms, from which is access to hanging balconies.

The home of the centennial state was intended merely as a place of rest and entertainment, and apart from relics and curiosities, contains no special exhibits, Colorado reserving her strength for the main departments of the Exposition. While nearly all the western states are well represented, there are some to whom special credit is due, and among them is Colorado, whose display is worthy of her resources and achievements. A generation has not yet passed away since, in 1859, the discovery of gold drew westward the second great

migration across the plains; and yet within that time Colorado, standing almost in midcontinent between the west and the further west, has already surpassed her older sisters, and with a future the greatness of which no man can foretell. As a mining region she ranks first in the production of silver and second in output of gold. Stock-raising has ever been a profitable industry, nearly 2,000,000 cattle grazing among her valleys and

octagonal in shape, is finished in native pine, the upper panels decorated with the heads of buffalo, elk, bear, and other animals indigenous to the state. Light is admitted through the stained glass roof of a dome beneath which are paintings that speak of the picturesque scenery and mineral wealth of Montana. The walls are tinted an olive green, as are those of the women's parlors to the right, all the furniture being upholstered in leather. Back of the main reception room is a banquet hall, in the centre of which is a group of mounted elk, and elsewhere are smoking and reading rooms supplied with desks, tables, and easy chairs.

Among the paintings most admired is that of Shoshone Falls, representing a seething mass of water falling over projecting cliffs, on the brow of which is a pine tree about to plunge into the rapids below. Among Indian subjects are the crossing of the Lo Lo trail by the Nez Percé tribe, and one named "Me," showing a plumed and painted brave gazing at his own portrait. Russell, "the cow-boy artist," entirely self-taught, has several subjects selected from incidents of his life, as "The Bucking Broncho," "The Buffalo Hunt," and "The Indian Tepee." From the women of Montana are several portraits, with photographs of early settlers and prominent citizens. In a broad gallery surrounding the rotunda are specimens of Montana's fruits, natural and preserved, together with samples of feminine handiwork.

On a site adjoining that of the Washington building, Colorado erected a neat and commodious edifice in style of old Spanish architecture, with slender towers, in which are spiral staircases, rising from the main façade to a height



THE HOME OF MONTANA



foothills, with annual shipments east of 100,000 head. Her yield of cereals and fruits is rapidly increasing, and her irrigation system is among the best in the republic. In civic growth no state has a prouder record, Denver, which in 1860 was a straggling village, with but a single window of glass and not a single pound of nails in all the settlement, having in 1880 a population of 36,000, and in 1890 of 107,000, or nearly a threefold gain within a decade.

Utah's participation in the Fair is largely due to the enterprise of her Mormon population, by whom were also subscribed most of the necessary funds, a legislative appropriation of \$50,000 being vetoed by the governor. In the territorial building and its contents, as in the principal departments of the Exposition, is strongly expressed the individuality of the Mormon community, a statue of Brigham Young,

for instance, standing in front of the edifice, while the arch near the main portal is a partial reproduction of the old Eagle gate of the Mormon temple. But the industries and resources of Utah are also fully exemplified,



COLORADO BUILDING



UTAH BUILDING



R. C. CHAMBERS

advantage the resources and possibilities of Utah. Gold, silver, and sulphur are the principal minerals displayed, and with them is shown the process of reducing sulphur and of handling rock salt and borax, both of which are found in large deposits. The silk and beet-sugar industries are well represented, and of cotton there are several specimens. A feature in the display is the collection of woman's work, and especially the articles contributed by the board of lady managers. Among them are portières of broadcloth richly decorated; rugs made of the skins of the grizzly bear and mountain lion, and a table and clock of native woods and onyx. Photographs are abundant, showing the scenery of Utah, her homes, her temple, and her tabernacle. Finally there is a large collection of Indian relics, including weapons, ornaments, and pottery, with an Indian mummy reposing at full length, discovered in one of the mountain caves.

Arizona, New Mexico, and Oklahoma jointly occupy a long, low, two-story building, a garden upon its flat roof displaying the typical vegetation of the southwest. Beds and columns of gigantic cacti are arranged in front of this structure, its plain veranda surmounted by a balcony, with plants in large vessels along the railing, overshadowing the entrance-ways to the headquarters of the three territories. To a certain extent the small exhibition rooms are a duplication of that which was displayed in the general departments, and among them are mineral specimens from New Mexico and Arizona, with the grains and vegetables of Oklahoma. In the second story are parlors neatly furnished and not without evidences of artistic taste. In New Mexico's chamber are beautiful specimens of woman's work, including that which comes from the Navajos, and here are also paintings of more than average merit. Among Arizona's collection is a life size crayon portrait of General Crook, and near it a picture of an old log-house built in Prescott in 1863, the pioneer building of that locality and the residence of the first governor. In photographic form are other historic spots, with several views of the Grand cañon. There is also a collection of pottery from one of the Indian agencies, and from the wife of General O'Neil comes a quilt in which are reproduced the corps badges of the United States army.

**WORLD'S FAIR MISCELLANY.**—On the eve of Chicago day A. F. Seeberger, treasurer of the Fair, signed his check for \$1,565,310.76, in payment of the balance due on debenture bonds, thus cancelling all the indebtedness of the Exposition.

The Illinois mansion, the most expensive of all the state buildings, cost \$250,000, and in its construction were used 3,000,000 feet of lumber and 650 tons of iron. The governor's suite of apartments is supplied with antique furniture, all from native woods, and with

and especially the industries of women, no less than twenty-six county associations, with clubs innumerable, working in unison with the territorial board, of which R. C. Chambers is president.

The home of Utah stands on the northern verge of the grounds, its front resembling, on a smaller scale, the classic structures that surround the central court. For the foundations, columns, pilasters, and other portions, the materials used are in imitation of native building stones, while the walls are fashioned as in a structure of adobes. The portico, with its Ionic pillars, is the point of architectural emphasis, and this is approached from a spacious terrace, to which a broad flight of steps leads from the avenue adjacent. In the centre of the building is an exhibition hall, open from floor to skylight, and elsewhere are reception rooms, offices, and a bureau of information, with other offices on the second floor, where also is an apartment for special exhibits.

In oaken cases around the central hall and in the gallery chamber the exhibits are neatly grouped, and in such manner as to illustrate to the best



JOINT TERRITORIAL BUILDING



carvings in high relief. A chamber was set apart for the Illinois Press association, the members of which held a special celebration on the 16th of June. In connection with the educational exhibits may be mentioned those of the state institution for the training of the deaf and dumb, contained in two cheerful sunny rooms in the



MARTIN HECTOR

southeastern corner of the building. In this institution are on an average about 500 inmates, the specimens of work displayed resembling those described in connection with other institutions in the chapter on Liberal Arts.

Michigan's building was dedicated on the 13th of September, in the presence of at least 20,000 of her citizens, among them Governor John T. Rich, ex-Governor Russell A. Alger, ex-Senator Thomas W. Ferry, General A. T. McReynolds, and I. M. Weston, president of the state board. In an eloquent speech, Thomas W. Palmer, president of the Exposition, sketched the earlier history of Michigan, and then spoke of the material and

social development evolved from the work of its founders and pioneers. Then came brief addresses from those who were identified with the history of the state. Director-general Davis, Fred Douglass, and Mrs Annet Laura Haviland were also among the speakers. Mrs Haviland was a prominent figure during slavery days as one of those who assisted in the escape of negro fugitives, by means of what was known as the "underground railway."

The home of Minnesota was dedicated by the members of the State Editorial association before it was formally opened, J. A. Johnson presenting the building to Senator Keller, by whom it was accepted in the name of the state. Of special interest were the impromptu remarks of L. P. Hunt, its superintendent, to whose exertions was largely due Minnesota's creditable display in all departments of the Fair. The building was christened in behalf of the press by Mrs Oscar Lineau.

Much of the credit for North Dakota's standing at the Fair is due to Martin Hector, president of the state board. Aside from her display in the Agricultural department, there was a most interesting exhibit in the Forestry building, showing what intelligent effort may accomplish in reclothing denuded lands. October 10th was North Dakota day, Governor Shortbridge, ex-governors Burke and Miller, and the president of the state board participating in the exercises.



JAMES O. CROSBY

The forty-seventh anniversary of Iowa's admission into the union was celebrated on the 21st of September by one of the largest assemblages gathered on special days. There was a military parade, together with a cadet corps and a brigade of girls attired in blue uniforms. At Festival hall the exercises included music by the Iowa state band and addresses by James O. Crosby, president of the

state board, Governor Boies, Chief Buchanan, of the Agricultural department, and Mrs Isabella Hooper.

During the early portion of September the people of Kansas devoted an entire week to celebrations and festivities, the 12th being selected as Kansas day. Among the participants were L. D. Lewelling, leader of the people's party, M. W. Cobun, president of the state board, and Solon O. Thatcher, one of the pioneers and founders of the state, with musical societies from Topeka and the state militia. Here also was one who, more than all others, revived the memories of early days when Kansas was the centre of political interest. This was Captain John Brown, whose father was the strongest factor in the agitation which prevailed in Kansas for several years before the civil war; the captain, himself a noted aboli-

tionist, taking part in the sack of Lawrence, but not in the attack on Harper's ferry, and at the outbreak of the war raising a company of cavalry. He is still a hale and vigorous specimen of manhood, though several years beyond the allotted span of life.

The cost of the California building exceeded \$100,000, its decorative scheme being intrusted to Mary C. Bates of San Francisco. In the rotunda the effect of the fountain, with circular basins and a lofty palm with spreading crown rising from its centre, is extremely beautiful, the green of the tree and the plants around its base contrasting with the terra cotta of the fountain, and the water trickling



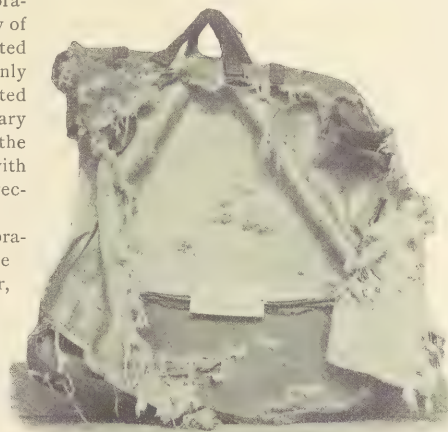
M. W. COBUN

over moss-covered rocks, or rather their semblance in staff. To the right of the palm-tree is the pampas palace exhibited by Mrs Strong, of Whittier, Los Angeles county. It is decorated with pampas plumes as soft as feathers and worked in tasteful designs, the interior furnished with articles made of the same materials. From the women of Alameda county came an attractive exhibit, the feature in which is a clock with framework of onyx and surmounted by marble figures, the numbered hours on the dial-plate encircled with pictorial illustrations of prominent buildings. A carved wooden mantel is the joint work of two Alameda damsels, and from this depends a curtain embroidered by the sisters of the convent of Notre Dame. The building was dedicated on the 19th of June, the keys being delivered to Governor Markham by James D. Phelan, vice-president of the state board. The governor's speech was followed by several others, and then came a feast of fruit and wine. On the 5th of August a number of argonauts met in their Jackson park home to exchange reminiscences of pioneer days. The 9th of September was selected for California's celebration; for on that day of 1850 she was admitted into the union, the only state to be so admitted without a probationary term. There were the usual addresses, with music, singing, and recitations.

The Utah celebration was also on the 9th of September, Utah being admitted as a territory simultaneously with the admission of California to statehood. At Festival hall Mormons and Gentiles met together, nearly 3,000

in number, among them Caleb West, the governor of the territory, and Wilfred Woodruff, the president of the church, with whom were George Q. Cannon and Joseph F. Smith. After singing by the Mormon choir, Mrs Richards, president of the woman's board, spoke a few words of welcome, and then came the governor's address, in which he referred to the exodus from Nauvoo, the toilsome journey across plain and mountain, and told how, amid the sage-brush plains of the desert, the Mormons planted their homes, living at times on boiled thistles and stewed thistle tops. The exercises concluded with an address from George Q. Cannon, followed by music and song.

A fountain, the base of which was formed of crude ores and the pedestal of cut crystals, was a contribution from the women of Lewis and Clarke counties, Montana. The bowl was of native silver, with a tube resembling the clematis vine. From Beaverhead county came, also as the gift of women, a table of native woods, its top of mosaic work in several hundred pieces, and on its side a panel made of silver furnished by the Hecla mine.



ONE OF WELLS FARGO'S EXHIBITS



THE MOSQUE - A PLACE FROM THE PAST, WHEN!





## CHAPTER THE TWENTY-FOURTH

### THE MIDWAY PLAISANCE



**I**F to any class of visitors the Columbian Exposition was somewhat of a disappointment, it was to those who went there merely in search of amusement. Instruction rather than amusement, but instruction conveyed in its most attractive form, was the main purpose of the Fair, and surely there were never such opportunities for a comparative study of what has and is being accomplished in every branch of industry and art. But men would not always be thus instructed; would prefer rather to take such education in homeopathic doses, with a strong admixture of recreation, of fresh air and sunshine, of saunterings among flower-beds and waterways, and above all with plenty of good things to eat and to drink. Hence it was that in favorable weather at least half of the visitors would be found outside the buildings, on the wooded island, on the lagoons, the boulevards, or seated in shady or sheltered spots listening to the music of the bands.

But as places of recreation there were none that would compare with the Midway plaisance, an epitome and also a supplement of the Fair, with its bazaars of all nations, its manifold attractions, and yet with educational as well as pleasurable features. All day long and far into the night this spacious thoroughfare, a mile in length and 600 feet in width, was crowded with sight-seers who, whatever else they missed, would make the tour of this novel and heterogeneous exhibition. Entering the avenue a little to the west of the Woman's building, they would pass between the walls of mediæval villages, between mosques and pagodas, Turkish and Chinese theatres, past the dwellings of colonial days, past the cabins of South Sea islanders, of Javanese, Egyptians, Bedouins, Indians, among them huts of bark and straw that tell of yet ruder environment. They would be met on their way by German and Hungarian bands, by the discord of Chinese cymbals and Dahomean tom-toms; they would encounter jugglers and magicians, camel-drivers and donkey-boys, dancing-girls from Cairo and Algiers, from Samoa and Brazil, with men and women of all nationalities, some lounging in oriental indifference, some shrieking in unison or striving to outshriek each other, in the hope of transferring his superfluous change from the pocket of the unwary pilgrim. Then, as taste and length of purse determined; for fees were demanded from those who would penetrate the hidden mysteries of the plaisance, they might enter the Congress of beauty with its plump and piquant damsels, might pass an hour in one of the theatres or villages, or partake of harmless beverages served by native waiters. Finally they would betake themselves to the Ferris



A JACKSON PARK ESKIMO



LADY ABERDEEN'S IRISH VILLAGE

wheel, on which they were conveyed with smooth, gliding motion to a height of 260 feet, affording a transient and kaleidoscopic view of the park and all that it contains.

In this miniature fair with its stir and tumult, its faces of every type and hue, its picturesque buildings, figures, and costumes is the most graphic and varied ethnological display that was ever presented to the world. All the continents are here represented, and many nations of each continent, civilized, semi-civilized, and barbarous, from the Caucasian to the African black, with head in the shape of a cocoa-nut and with barely enough of clothing to serve for the wadding of a gun. Here, in truth, one may learn more of foreign lands,

their customs, habits, and environment, their food and drink and dress, their diversions and their industries, than years of travel would teach him. If here and there is a certain admixture of indecency, so broad at times as to call for the interference of the authorities, this does not detract from the value of an exhibition richer and more comprehensive than any before attempted.



LORD ABERDEEN

Entering the plaisance is first observed, on either side of the avenue, a nursery of fruit trees such as are raised on French and California soil, with miniature groves of evergreens from the northwest, and other duplicates of the out-door exhibit in the Horticultural department. Then comes a line of low thatched cottages whose appearance indicates the abodes of cleanliness and thrift. Here is a display of Irish industries, within what is known as Lady Aberdeen's village, largely organized by one who has devoted many years of her life to the good work thus represented. In this she first became interested during her husband's



LADY ABERDEEN AT HER SPINNING-WHEEL





PETER WHITE

term of office as lord lieutenant, and as president of the Irish Industries association, assisted by the late Peter White, its secretary, and with his wife as manager of the enterprise, gave to the Columbian Exposition one of its most attractive features.

The main entrance reproduces in fac-simile the doorway of a chapel built on the rock of Cashel in the opening years of the twelfth century by Cormac, "the bishop king of Munster." Passing through this arched portal, its panels enriched with mouldings and heads in low relief, the visitor enters the cloisters of Muckross abbey, the original of which, a picturesque but melancholy ruin, stands hoar and solemn amid the most beautiful scenery of the lakes and mountains of Killarney. But

here are no priests at prayer or study; no sound nor sign of devotion or of penance; for like everything else about the village, these cloistered retreats are essentially practical. Opening the door of one of the apartments, we find here around a turf fire above which a potato pot is boiling, a number of men carving trinkets, furniture, and articles of church decoration. Thence we may pass to other rooms or cottages where various industries are in progress. In one young women are busied over lace and crochet work, as made in the cottage



COTTAGE IN LADY ABERDEEN'S VILLAGE

homes of Limerick and Carrickmacross; in another there is knitting and the making of material for homespun; in a third, embroidery; in a fourth the carving of bog-oak, of which there are many beautiful specimens. Elsewhere dairy-maids, rosy and buxom, are showing what their deft fingers can accomplish with the aid of modern utensils and the milk of Kerry kine.

Adjacent to the cloister of Muckross is the cottage of Lady Aberdeen, named "Lyra-ne-Grena," that is to say, the sunny nook, and over its door the inscription in Keltic, "Cead Mile Failte." Its quaint, old-fashioned windows are shaded by the low, overhanging roof, with a frieze



ST PATRICK'S BELL

of shamrock in the interior, whose walls are frescoed and tinted in green. Much of the antique furniture of Irish oak or mahogany consists of historical relics. There is an old spinning wheel to the use of which her ladyship is no stranger, and in one of the corners is a writing desk that formerly belonged to Thomas Hood. Carpets and curtains represent Irish industries, and there are prints upon the walls of popular subjects, with portraits of famous men, as O'Connell, Swift, and Pope.



AN EXHIBIT OF LACES



WEAVING AND SPINNING





MODEL DAIRY MAIDS

paniments for singers of national airs. There is also Tara's hall, in which are many relics, with duplicates of the ancient metal work fashioned by a Dublin jeweller and briefly described in the chapter on "Foreign Manufactures." In this connection may be mentioned the harp of Brian Boroihme, bequeathed to his son Donagh, by him presented to the pope, and by the pope to Henry VIII, this precious heirloom passing, after further changes of ownership, into the museum of Trinity college, Dublin, where now is the home of the original. Finally there is the village museum, where are many objects of interest, with photographs of Irish antiquities, the latter a contribution from Lord Dunraven.

At the opposite side of the plaisance, on a site originally allotted to a Bohemian glass company, is a building which bears upon its front the



LADY ABERDEEN'S COTTAGE



IRISH RELIC

inscription, "International Dress and Costume Company." Around its entrance is usually gathered a larger crowd than before the more pretentious structures that line this cosmopolitan thoroughfare; for within are five and forty damsels fair to look upon, selected from forty-five countries to represent as many national types in typical costumes, fashioned, it is said, by the great man milliner of Paris. To a Chicago journalist belongs the credit, if credit be due, for this novel and daring exhibition. With the aid of certain business men, by personal interviews, by liberal advertising and expenditure, and above



SHRINE OF ST PATRICK'S TOOTH

Passing thence across an open court we come to Blarney castle, built in the fifteenth century by one Cormack MacCarthy, a brave man and a strong, on a site where Druids held their mystic rites long before Saint Patrick and his white-robed disciples set foot in the land of Erin. Its counterpart at Jackson park is a three-story building, set apart for the village workers; but for visitors there is a winding staircase, from the top of which one may creep to the battlements at risk of life and limb and there kiss the magic stone and obtain a view of Ireland in the form of a large relief map. But it is a prosaic structure, with little of the romance contained in the original, and especially is missing the creeping ivy on the walls.

In a building known as the "Sheppa" there are more Irish industries. Then there is the music hall, with pipers and jig dancers, where also a young female harpist from the Dublin academy of music plays sweet accom-





THE HARP OF BRIAN BORÓICHME



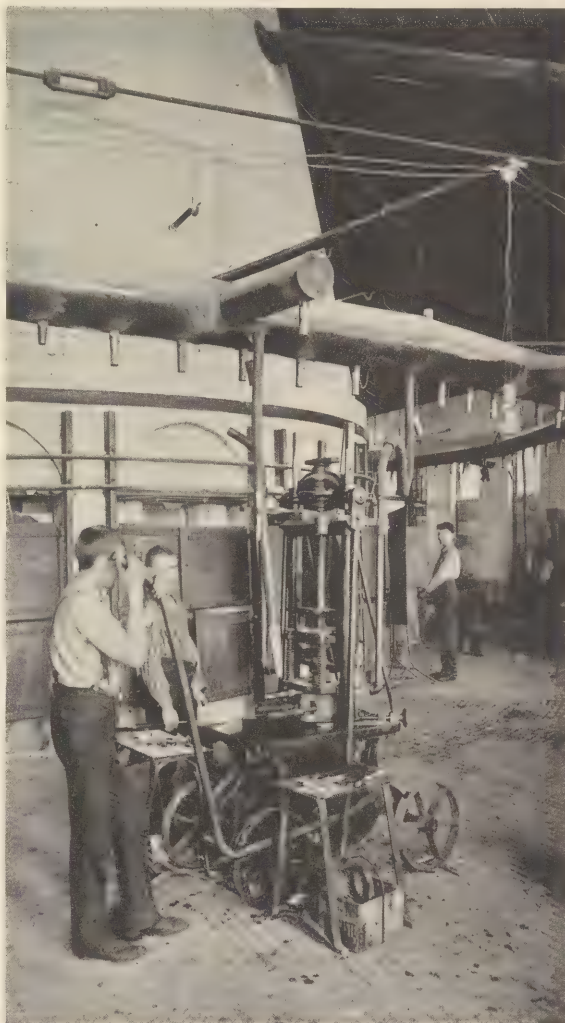
EXHIBIT OF SUBMARINE DIVING

company, which stands well back from the plaisance as it passes under the viaduct of the Illinois Central railroad, is an object of passing interest. Although less an exhibit than a portion of the business machinery of the Fair, many visitors pause for a moment to observe the methodical workings of one of the most prominent organizations of its kind. Across the avenue is a plain, two-story house of red brick, with narrow front and neat interior, representing a type of residence occupied by thousands of Philadelphia workingmen. Diagonally opposite, and under the viaduct of the railway, is a small frame building on which is the sign: "Old-Tyme Farmer's Dinner." Here pork and beans, doughnuts, pies, and other viands are served by Vassar and Wellesley girls, attired in costumes of the olden days, on little square tables with horn-handled knives, two-pronged forks of steel, and the quaintest of antique dishes. The idea of furnishing such meals originated with Mrs Brinton, better known as "Mother Southwick," the name which she bore at the Centennial Exposition, where she presided over a similar place of entertainment. Near by she has reproduced another of its features in the model of a revolutionary log cabin, with its two rooms and loft, the parlor extending across the building, and with yawning fireplace, crane, and kettles, and all the other furnishings of a century ago. Opposite the door is ranged upon a sideboard the family plate; and here are ancient hymn-books, candlesticks, and spinning wheels, and oldest of all, the cradle of Peregrine White, the so-called "babe of the Mayflower."

In an unpretentious structure known as the Scenic theatre are presented through the medium of electricity effects of dawn and sunrise, midday, twilight, moonrise, the night sky gemmed with stars, thunder-storms and fair weather, as seen in the Tyrolean Alps, accompanied by such instrumental music and weird yodling as the traveller hears in these favorite resorts. A small building across the way is almost filled with a tank, in which exhibitions are given in submarine diving, for the purpose, as is announced, of showing how lost articles are recovered at sea. In the vicinity is a model which illustrates the working of a Colorado gold mine, the mechanism, which is operated by electricity, including bucket, pump, hoisting cage, and cars, such as are used in the Saratoga mine in Gilpin county. The mountain is shown as though cut in two, with the mine on the foot wall of the vein, thus exposing its underground workings. On the highest level men are

all by dint of phenomenal self-assurance, he collected and attired these representative beauties of Italy and Greece; of Germany, France, and Austria; of England, Scotland, and Ireland; of Cuba, Mexico, and all the Americas. This was commonly known as "the Congress of beauty," but also by a score of other titles, by any title in fact, rather than the one which appears above the doorway. As to the quality of the display, whether of face, figure, or costume, there was much difference of opinion, and as those of my readers who cared to see it have doubtless judged for themselves, it is unnecessary here to make further mention of the subject, except perhaps to say that better looking women, and better attired, can be seen any day in the cities and towns of the United States.

To foreigners the Adams Express



FURNACE ROOM, LIBBEY GLASS WORKS



seen at work, with cars running to the ore chutes, where they are filled and then returned to the shaft, and hoisted to the surface. Here also are the shaft houses, blacksmith shop, powder magazine, boarding-house, ropeway, stamp-mill, water flumes, dump, ore-bins, piles of wood for timbering, and all other necessary appliances.

It was intended, as I have said, to hold near the park entrance to the plaisance an exposition of Bohemian glass manufacture; but the plan was abandoned and the exhibits placed in the Austrian section of the Manufactures building, though without any demonstration of the processes whereby they came into existence. Such industries are by no means neglected, however, among the shows of the plaisance, as appears in two large structures west of Mother Southwick's cabin, facing each other on either side of the avenue.

In style of architecture they are essentially different,



SMOOTHING AND POLISHING



WEAVING GLASS FABRICS

here an exhibition of art in its application to glass and mosaic work.

Opposite is a more substantial structure, with corner towers and domed central roof, glass in prismatic forms being grouped along the gravelled walks which approach it, and in a case near by specimens of glass spinning of wondrous delicacy. Here is the exhibit of the Libbey Glass company, showing not only its products but a complete working establishment, with modern machinery and apparatus for manufacture. The main vestibule leads into a semi-circular glass-house, or blowing room, with melting furnace in the centre, in the form of a truncated cone. Just within its circumference and a little above the base are the melting pots, enclosed in a metallic canopy, the heat which enters from below being generated from crude petroleum pumped through pipes from Ohio wells. After being subjected to a heat of more than 2,000 degrees of Fahrenheit, the crude materials are in the form of a molten mass, ready for

the one on the south resembling an Italian cathedral, rich in coloring of gold and green, the winged lion which surmounts it recalling a similar figure in the square of St Mark's at Venice. On the small island of Murano, near that city, is the factory of the company which erected this palace of glass and mosaic work, an enterprise established more than a quarter of a century ago, not only as a business venture but to revive the ancient industry of ornamental glass work in which Venice was at one time preëminent. Among the best of the enamelled mosaics are two scenes in the life of Columbus, which at the close of the Exposition were to be transferred to the Columbus building in Chicago. Some of the most artistic specimens from the Murano factory, gems which are scattered among the museums and churches of Europe, are also shown as reproductions, and there are ancient toilet bottles, cups and goblets, oriental enamelled glasses, renaissance filigree and laces fashioned in glass, with etched and frosted glass in colors of sapphire, agate, topaz, jasper, onyx, and amethyst. In a word there is



ENGRAVING AND ETCHING





CONGRESS OF BEAUTY

1. The Grecian Type    2. An Octoroon    3. A Welsh Girl    4. Swedish    5. A Star of the East  
6. German    7. From Norway    8. Of the Orient    9. American





ST LAWRENCE GATE

reached the proper consistency, it is turned with a solid iron rod, and by means of wooden tools shaped into plaques, plates, and other forms. After leaving the blowing room, all glassware is subjected to a graduated or annealing heat, so tempering it as to resist changes in temperature.

Above the blowing room and the tempering oven are quarters for the cutters with their steel wheels, the smoothers with their wheels of sandstone, and the polishers with wheels of wood, abrading substances being used of various degrees of hardness. A more interesting process than any, though of less practical value, is the manufacture of what is termed glass cloth;

but this is too complex here to be described in detail. Other departments belong to the engravers and etchers, and those who decorate the various articles in appropriate colors. Finally there is the crystal art room wherein are displayed the finished products of the factory. Ebony wood work forms an effective setting for the cut-glassware at the sides of the room, the upholsterings and tapestries of spun glass in the centre, and the ceiling decorations made of the same material. At the entrance is a so-called Henry Clay punch-bowl of 1812 in pressed glass, which though of excellent workmanship, is in marked contrast with the



INTERIOR VIEW

cut-glass bowl at its side, recently manufactured by the company. Attention is also attracted to ice-cream sets encased in brass-bound morocco, to sherbet and punch jugs of Roman design, to quaint decanters of Venetian shapes, graceful celery trays, ice-tubs, honey dishes, and a lamp of elaborate pattern designed for a banquet hall. Among articles in spun glass there are curtains, portières, and decorations for ceilings and walls, with lamp shades and other fancy articles beautifully painted, all of them intended to show the adaptability of spun glass to artistic purposes.

Opposite the Libbey works is the zoölogical arena of Carl Hagenbeck, who claims to have domesticated and trained more wild animals than any living man. The programme is both amusing and



CROWDING INTO DONEGAL VILLAGE



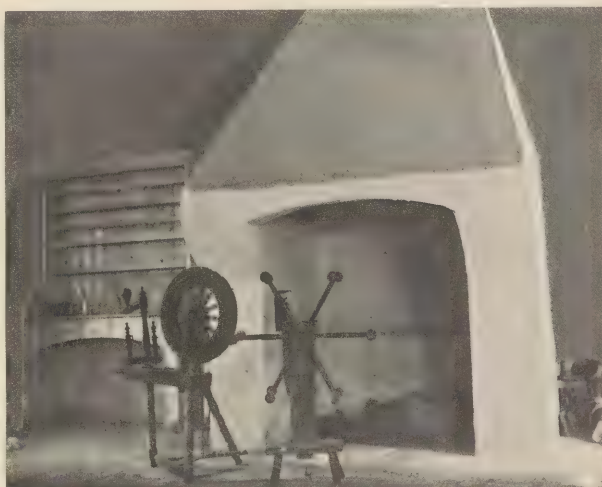
WISHING CHAIR



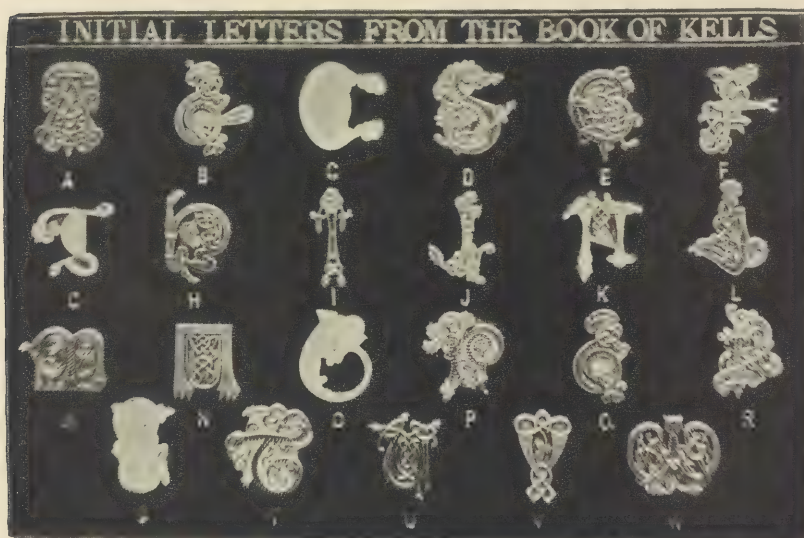
varied, for his menagerie includes elephants, lions, tigers, leopards, bears, dogs, pigs, goats, sheep, horses, ponies, zebras, and boars, with monkeys galore and many cases of storks and parrots, thus affording the possibilities of infinite combinations and forms of entertainment. Prince, the equestrian lion, rides on horseback and springs over banners with the grace and agility of a circus girl. Bengal tigers, while a brother tiger balances himself on a revolving globe. Polar bears walk the tight rope, and black bears roll down a toboggan slide. White goats frisk around the ring in company with spotted panthers, and a tiny poodle holds the hoop for a great black panther whose breath might blow him away. The most incongruous elements of the brute creation are thrown together in this amphitheatre, violating all preconceived notions of the forest and jungle by associating as neighbors and friends. So tame are the beasts that at times the chief keeper takes his lions or other performing animals for an airing around the plaisance, despite the protests of Columbian guards and special police.

Passing from the arena, the pilgrim of the plaisance observes at the opposite side of the avenue an ancient looking gateway flanked by towers, and beyond and above, a picturesque group of castellated structures. This is the Donegal Castle Irish village and contains the exhibits of the Donegal industrial fund, founded by Mrs Ernest Hart, who commenced her labors more than a decade ago, establishing schools for instruction in various industries here illustrated as in Lady Aberdeen's village. In the good work thus accomplished she received the hearty coöperation and sympathy of other women, whose sole aim was to educate the Irish peasantry in home industries, and to furnish a market for their products without making them objects of charity. Substantial aid was also rendered by the prince of Wales, by Gladstone, Cardinal Manning, and other influential men in church and state; so that presently factories were built and operations conducted on a larger scale.

But it was mainly through the efforts of Mrs Hart that these results were accomplished, as fully exemplified at the Fair. Beginning on a small scale, with 50 pounds of wool weighed out on her kitchen scales, and with £100 worth of goods stored in the bath-room of her London home, she gradually taught, through hand-books translated into Gaelic and a staff of instructors trained by herself in arts which she had first to



SPINNING WHEEL

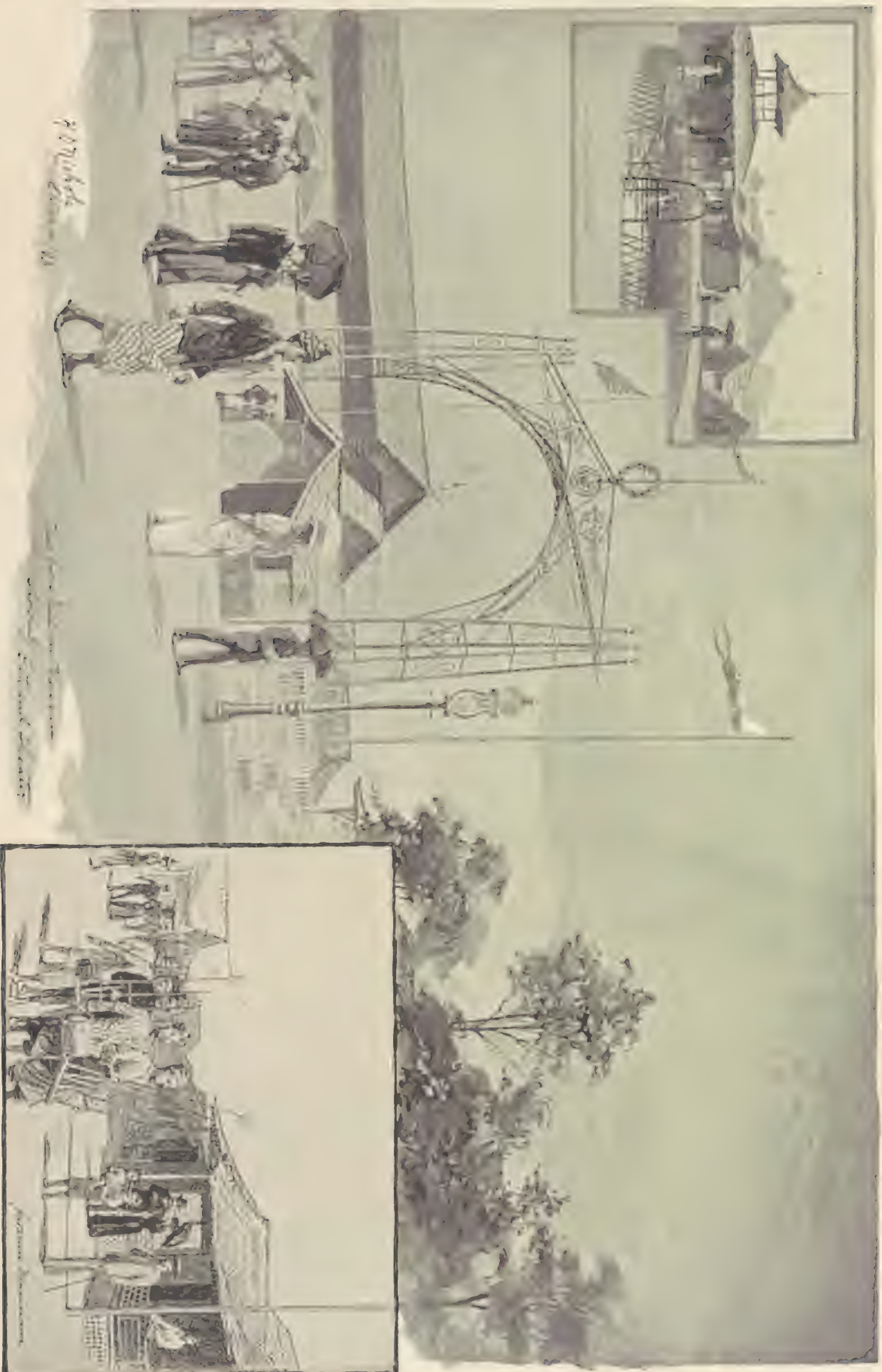


USED IN THE KELLS EMBROIDERIES

learn, the processes of spinning, weaving, drafting, lace-making, wood-carving, embroidering, and dyeing, the peasantry attaining a standard of excellence which won for them more prizes at the Paris Exposition of 1889 than were awarded to any class of British exhibitors. To this task she devoted ten anxious and laborious years, overcoming difficulties which to women of common mould it would seem impossible to surmount. The people for whom she labored lived in a region separated by 40 miles of bog from the nearest railroad station, its one narrow harbor inaccessible except at times to steamers of the lightest draft. On its barren and rocky soil no horse plough could be used, and even if surplus products were raised there was no

outlet to market; for with almost impassable roads during the greater part of the year, the freight to London on a ton of goods was five times as much as from London to New York. And yet in this region there were 100,000 inhabitants, of whom a large proportion, though honest, industrious, and always willing to learn, were in a state of chronic destitution and not infrequently of actual starvation. Such was the district which the patroness of the Donegal village raised from its abject condition to one of relative prosperity, while asking for





JAPANESE VILLAGE

its manufactures no more than their market value. Said the lord mayor of Dublin, while speaking on the village green on Irish day: "We ask not for your compassion nor for your pity, but would simply place before you articles recommended by their cheapness, their artistic beauty, and their excellent workmanship."

In the Donegal village are so many features of interest in its artistic presentment, its industrial aspect, and its record as a national enterprise, that it is difficult to condense into reasonable space a description of its character and contents. The architectural designs were for the most part the result of much thought and painstaking; but the drafting of them was the inspiration of a night,



the credit for the final elaboration of the plans being largely due to Geoffrey Hamlin of New York. The façade as seen from the entrance at the plaisance reproduces the St Lawrence gate, of which the original has stood for six centuries or more in the little town of Drogheda. Passing the portcullis of the keep a view of the village is obtained from its archway, presenting a scene that is quaint and picturesque, and essentially Irish. Around the green are grouped the white-washed cottages in which are conducted the industries fostered by Mrs Hart and taught in her technical schools. In one of the cottages wool is being spun into a fine firm thread by an Irish lass, as in her home at Gweedore, and this a weaver warps on his frame and weaves on an antiquated loom into the soft homespun which have won gold medals and highest awards at

six international exhibitions, receiving high honors from the judges of the World's Fair. Elsewhere lace-making is in progress on a tambour frame by one of the oldest workers for the fund, whose filmy fabrics were carried away with delight by the infanta Eulalia, and have formed part of the trousseaus of royal princesses. Here also one of the pupils of the technical lace school is at work on Torchon laces of colored flax, in tints and materials patented for the benefit of workers, and registered under the name of "the Kells laces," now largely used for the decoration of furniture and table linen.

In the weaving cottage Kells linens are being woven on a hand loom, these linens, skilfully dyed by processes invented by the foundress, forming a specialty of the fund. They are largely used as a basis for embroidery and for wall hangings and window curtains by the art schools of Great Britain, and by firms whose business is in the line of art. They also form the basis of the famous Kells embroideries, invented in 1884 as a new Irish industry, and for which was received a gold medal at the International Inventions Exhibition in London in 1885, with high awards at Paris, Melbourne, and other international expositions. In these embroideries flax is used for the material, and the polished threads are worked on dyed and hand-made linens and woollens from designs adapted from the *Century Book of Kells* and from old Keltic manuscripts. In other cottages wood carving is done by young men taken from the plough and educated in London, these being the first Irish lads ever trained for the purpose, many of them returning to their native villages and engaging in business for themselves.

In the banqueting hall of the old castle of the O'Donnells, as here reproduced from drawings loaned by its present proprietor, are portières such as adorn the walls of Windsor and Hawarden castles, their designs selected by the queen and by the wife of William Ewart Gladstone. Here also are Irish point laces in simple



DENIZENS OF THE JAVANESE VILLAGE



and elaborate designs, with hand embroidered court dresses, vestments, altar cloths, table linen, and counterpanes, the last of these articles resembling those which were made in France in the middle ages. There are handkerchiefs ranging in price from a few cents to \$150, and there are homespun garments worn alike by Galway market women and princesses of the blood, all these and other specimens transferred from the village factory at Gueedore to the Donegal village at the plaisance.

Passing into the concert room, adorned with the works of Irish artists and the portraits of those whom Irishmen love to honor, we listen for a while to native melodies, chanted with harp accompaniment by the sweet songsters of Erin. Then stepping forth on the village green, we find ourselves in front of the ruined keep of Donegal castle, once the stronghold of the O'Donnells, the princes of Tyrconnel. In the garden behind rises to a height of 100 feet the round tower, a replica of one of these curious structures built more than a



THE JAVANESE THEATRE

thousand years ago, presumably as places of refuge for the monks and their sacred vessels when Ireland was overrun by the Danes. In this garden is also a reproduction in miniature of the Giant's causeway, and in full size of "the wishing chair."

Under the shadow of Donegal castle is the Japanese bazaar, filled with bronze and lacquer work, with fans and screens, vases and silks, figures of mythological characters, and articles of bric-a-brac such as are exposed for sale in every city of the United States, most of them, be it observed, mere counterfeits of Japanese art and workmanship. While in the bazaar itself there are no fictitious exhibits, there are few that cannot be seen to better advantage in the Manufactures and other departments of the Fair. Hence it is unnecessary here to describe them in detail.

The Javanese village beyond, known also as the Dutch settlement and the South Sea Islanders' village, is among the most interesting features of the plaisance. It is one whose whereabouts will not be readily mistaken; for in front is a miniature wind-mill, such as are used in Java to scare away the myriads of birds that infest the rice fields, emitting a volume of harsh, discordant sound altogether out of proportion to their size. The entrance is in the form of a bamboo archway, above which is a wreath and sword combined, the sign-manual of the old East India company. The entire village is inclosed by a ten-foot fence of bamboo, and consists of some 46 buildings, set on blocks of wood a few feet from the ground, including a temple, two shops where different processes of manufacture are exhibited, and in the central plaza, a tea house in which natives serve pure Java tea, coffee, and cocoa, and a theatre whose main attraction is its dark-eyed, willowy dancing-girls.

From the huts occupied by Javanese workmen to the cottage of the prince yclept Raden Adnen Soekmadilaga, the structures are of bamboo, roofed merely with rushes and bound together with fibres, but



perfectly water-tight and almost as strong as they are flexible. Each of the huts has a portico in front, where women make silk and gold embroideries and filigree work, weave mats and baskets, and dye and stamp their cotton goods, while men are fashioning weapons, brass ornaments, lacquer work, cigarettes, and appliances for Javanese games. The interiors are cheerful and clean, decorated with brightly colored cloths and divided usually by curtains. The cooking is performed in a building separated from the general living apartments, and after each meal there is music rendered on native instruments. In the residence of the prince are richer cloths and



embroideries than are seen in most of the others, with split bamboo matting, scorched to a soft brown, covering the floor. Except for this and the headquarters of the officials, nearly all the buildings contain within them a workshop, where the keepers sit on the bamboo floor with their goods scattered around them. These include not only the various manufactured articles, but small packages of tea, coffee, spices, tin ore, gum, sandal-wood, mahogany, ebony, and other products of the Malayan archipelago. Curious articles made of bamboo and palm, scented roots, rattan, cinchona, preserved fruits and insects, with models of bridges, carriages, and household and agricultural implements, and photographs of picturesque scenery, give some idea of the resources of the Dutch possessions and the capabilities of the natives.

There is a small, square temple of worship or mosque, with the priest sitting in a box on the altar, the roof surmounted by a minaret, whence he calls the devout to prayer. Opposite is the theatre, the only building to which an admission fee is charged. It is merely a large thatched cottage, the walls inside and out being covered with painted squares of bamboo matting. The stage, elevated a few feet from the hall, extends across it, and is about ten feet deep, with a series of platforms behind it, each a yard higher than the other; these for members of the orchestra, whose pieces consist of a violin-shaped

instrument with two strings, a small bamboo flute, and brass and copper gongs ranging in size from a saucer to a wash tub. Each gong has a knob in the centre which is struck with a stick, wound at the end with palm fibre; but the music is simple and sweet, differing entirely from the ear-piercing discord of a Chinese orchestra. Especially is it adapted to the slow, gliding movements of the dancing-girls, who in their way are as piquant and certainly more modest than their western sisters of the stage. With bare arms, shoulders, and feet, but with no unseemly exposure of person, their slender, lithe, and delicately rounded forms are decked in embroidered silks and velvets, and with bracelets and necklaces of gold. The dances constitute a series of graceful poses, the movements almost confined to the portion of the body above the waist, and all having a certain dramatic or symbolic significance. Although the dancing-girls of Java are petted and indulged in a way that would turn the heads of most of their sex, they conduct themselves as befits maidens who are educated by the priesthood, belong to a religious order, and are of such birth and character as to be sought in marriage by nobles and princes.

Of the eight dancing-girls engaged at the theatre four were sent by the sultan of Solo, a vassal monarch tributary to the home government and reigning over the central part of the island, while the other four, with the male dancers, actors, wrestlers, fencers, and kite-flyers, come from the Preanger regencies, a western province of Java. All are in charge of Prince Adnen, who, having made three pilgrimages to Mecca, ranks as a high priest. He is assisted by Carlo Ferrari, foreman of the village, a man who has resided in the Dutch



SAMOANS



East Indies for more than a quarter of a century, and is there esteemed as a hunter of renown. Among the employés are several from the court theatre, and the production here of a comedy which has held the boards of Javanese temples of the drama since time immemorial should be an event in the dramatic annals of the west. One man describes the humorous incidents, and the other actors and actresses delineate them in pantomime, the dancing girls appearing between the acts, as do the wiry fair featured athletes. The last are of a superior breed to the majority of the village population, forming in fact a race in themselves, like the professional athletes of Japan. From babyhood they have been fed, clothed and trained with a view to their future career, and never marry outside their caste.

Before leaving the village, a call should be made at the cottages of the directors, where are costly and elegant fabrics, rare works of native art, and not a few curiosities. Here are krisses or daggers, curved and straight, with blades of absorbent steel, engraved with



THE JOHORE BUNGALOW



ROUNSEVELLE WILDMAN

dragons and set with costly jewels, handles of precious wood and sheaths of solid gold. These are the property of G. J. L. de Bruyn, who as manager of the village and one of the directors, occupies a residence adjacent to the theatre. A number of rhinoceros' feet are also on exposition, a portion of them fashioned into a lady's toilet case. In a cage just within the entrance is an orang-outang, all conscious of the honor conferred on him, and near by are men armed with long poles, to the ends of which sharp thorns are fastened, pointing backward. These, however, are not to guard the animal, but to represent the native police, and should some unruly inmate get beyond the control of the high priest or the

Columbian guard, he would find himself caught in their clutch, though no such occasion was apt to arise within the peaceful confines of the Javanese hamlet.



THE SULTAN OF JOHORE

The Samoan village or South Sea settlement across the avenue is also essentially native, the entrance



PANORAMA OF THE BERNESE ALPS

being in the form of a large war canoe, constructed of dark redwood bound with fibres, and as figurehead, the rude carving of a sea god. Sails made of matting, long oars, a wooden trough or gong, bows, arrows, axes, and other implements of warfare are displayed, while the boat itself is gashed and seamed from hard service on the Pacific. In front of the entrance is the house which formerly belonged to Mataafa, the prince who rebelled against German rule and was deposed. It is shaped like a bee-hive, with apex some thirty feet above ground, and is constructed of the wood of the bread-fruit tree, which in Samoa is proof against ants. In this hut and in one erected in the centre of the village, are the principal curios, which include specimens of tapa cloth made from pounded and tanned strips of mulberry bark, fans, war-clubs, native ornaments, cooking utensils, miniature canoes, cotton fabrics, and



INTERIOR TURKISH MOSQUE



various trinkets, shells, and native woods. But the most graphic feature of the exhibit is in the natives themselves—men, women, and children. When the weather permits they are clad in strips of tapa cloth, as scant as decency allows, the girls and women being decked with wreaths of flowers of which they are passionately fond. The men sing their war songs, the casting of spears, the throwing of axes, the rush of the canoe, and the shock of battle being depicted in the dance. The tall and by no means ill-favored women have their own songs and dances of a festive and more pleasing nature. All sing and dance, partaking at times of kava, the national drink, the mode of life resembling that in the Javanese village, except that there is more war in the atmosphere. The people are clean and hospitable, and their houses, thatched with wild sugar cane, the floors being spread with mats, are cheerful and airy. Mats, it may be here remarked, play a most important part in



TURKISH TAPESTRIES

the life of a Samoan. When a tribe goes to war the first thing to be done is to secure the mats in a place of safety; for they descend as priceless heirlooms from family to family, and without them a bride's dower would be considered entirely incomplete.

The Samoan village is in charge of Henry J. Moors, an American who has lived in Samoa for a score of years, is a master of the South Sea dialect, the confidant of the deposed Mataafa, induced the islanders to leave their homes in Fiji, Wallis island, and Samoa, and is responsible for their safe return, the exhibit being organized by the Oceanic Trading company, of Chicago.

Of all the foreign countries which find expression at the Fair none are better represented than Johore, a sultanate at the southern extremity of the Malay peninsula, rich in timber and other woods, and with a soil well adapted to the growth of rice, coffee, tobacco, sugar-cane, and other tropical products. Of the display contained in the Agricultural building mention has already been made, and elsewhere, especially in the Johore bungalow, occupied by the retainers of the sultan, are other exhibits, of which Rounseville Wildman is in charge, forming together a complete exemplification, not only of the productions, but of the buildings, implements, arms, dress, and customs of this cosmopolitan people, which includes besides Malays, Chinese, Javanese,





TURKISH BAZAAR





THE TURKISH SULTAN'S SILVER BED

tain it is that if panoramas can ever be classed as works of art, this mammoth depiction, covering more than 6,000 square feet, is worthy of that distinction. Of Alpine paintings there is no lack, and scores of times have the Jungfrau and the Matterhorn been placed on canvas, their beauty and sublimity, their scenic effect and stupendous proportions rendered so far as such rendition was possible. But here is not a single alp but an entire range of alps; not a mere prostitution of nature to catch the eye of the sight-seer, but an interpretation of the genius of the mountains in all their majesty and loveliness.

By a citizen of Geneva, Henneberg by name, three Swiss artists were chosen for the task, men of repute, but each in a separate line of art, and forming together an excellent combination for such an artistic enterprise. These were Eugène Burnand, eminent as a landscape and animal painter, and perfectly at home in Alpine subjects; M. Furet, also a landscape artist, whose themes are usually chosen from the middle regions and the plains; and Baud-Bovy who passes much of his time in studies of local life, and especially the life of mountaineers. By this trio were chosen four collaborators, and to these were later added three Parisian artists. In the summer of 1891 the party encamped on the summit of the Mäennlichen alp, and there passed several months in study and sketching; then returning to Paris, they shut themselves up in their studio, a large circular shed, formerly used for a military panorama, and in October of the following year the work was completed, receiving from the ablest of critics unqualified commendation and winning for its artificers the cross of the legion of honor.

Standing on an inner platform which here represents the Mäennlichen, its summit facing the Bernese alps and standing like a tall promontory between the valleys of Lauterbrunnen and Grindelwald, the spectator views, as from a belvedere, the entire panorama of the Oberland. Here are all the most beautiful and majestic elements of alpine scenery; fields of virgin

Siamese, Arabs, and Dyaks. In models are structures of many patterns, from the rude huts of the aboriginal Saki and Jacoons to the palace of the rajah and the mosque where his subjects worship. There are also models of every form of boat used by the aboriginal or by the modern Malay and Chinaman, with a primitive forge and blacksmith's tools and household and other utensils of quaint device. There are costumes of many descriptions, from such as are worn by the sultan's company of Chinese actors to a bridal dress and to the usual attire of the various classes, together with the loom on which is woven the national garment known as the sarong. The bungalow itself was built in Jahore, is thatched with palm and raised several feet above ground, as is the custom in that country for protection against tigers, snakes, and ants. In the upper room is the bed of a Malay rajah and the throne on which he sits at meat.

Passing the natatorium on the southern side of the plaisance, we come to the panorama of the Bernese Alps contained in the building adjacent, and as this represents, as I have said, the sole contribution of Switzerland to the department of Fine Arts, it is worthy of more than passing mention. Cer-



"FAR-AWAY" MOSES



OBELISK IN TURKISH VILLAGE

diverse and heterogeneous elements. Even among the higher alps, where Wetterhorn and Shreckhorn, Eiger and Jungfrau raise their snow-capped summits thousands of feet above their neighbors, there is a certain rhythm of outline, a balance of plane, in keeping with the design and yet a faithful reproduction of nature's handiwork. The verdure on their lower slopes and the landscape vistas at their feet all add to the general effect, while a dark network of forests affords an artistic setting for plains and valleys. "I have seen many panoramas," said the president of the Alpine club; "but I never saw one that impressed me so profoundly as this. I hope to see it again; since we are assured the painting will be returned to Paris after the Columbian Exposition for which it was intended."

In connection with the panorama of the Bernese alps may be mentioned that of the volcano of Kalauea, displayed in a polygonal building further to the west of the plaisance and on the opposite side of the avenue. Over the portal is the figure of Pele, the Hawaiian goddess of fire, its pose suggested by the well-known legend of a race wherein the goddess, being worsted by a native prince, pursued him in a chariot of molten lava, hurling fire-brands after him as he sought refuge in the sea. Circling the walls within are some 22,000 square feet or nearly half an acre of canvas, whereon is depicted "the inferno of the Pacific," the largest volcano on the face of the earth. While not without merit, it does not compare with the other as a panoramic painting, the effect being largely produced by electric lights, pyrotechnics, and other mechanical contrivances. The point of observation is in the very heart of the crater, and not on its brow where thousands of travellers have stood. Gazing upward and around, the spectator is encompassed with

snow; glaciers and walls of rock, seamed with cascades or interlaced, as with threads of silver, by the filmy veil of waterfalls; valleys and cañons furrowed by mountain torrents; grass-covered slopes and the sombre foliage of forests, with here and there a peaceful hamlet nestling among lush meadows and thriving orchards. Then comes the reverse side of the picture, a spacious undulating plain, with the village of Interlachen, the blue waters of Lake Thun, and beyond, the dim outline of Jura, all forming a scene of surpassing loveliness—the idyll of the pictorial drama.

But, as is remarked by Philippe Godet, laureate of the academy, the "keynote of this grand symphony is the imposing pile of the Bernese alps, which displays itself from the Männlichen in all its magnificence. Here is the Jungfrau, bathing its pure brow in the ether, to the right, the Blümlis alp with its finely cut profile; the broad ridges of the Breithorn and Tschingelhorn; to the left of the queen of the Oberland, the Mönch, with its huge steep of ice; the Eiger, shooting into the air its rugged silhouette and turning its precipitous front to the setting sun; the Schreckhorn, darting solitary into the blue; the Wetterhorn, moulded and poised like an ideal temple. At the feet of this range of giants, the two valleys spread themselves lazily out; on the left, Grindelwald, the silvery roofs of its chalets, its fruit trees and ploughed fields, its dark masses of forest, scaling the steep inclines; its cowboys, its herds of cattle white and red; its parti-coloured goats, all basking in the sun; on the right, opening out like a bottomless abyss, the sterner valley of Lauterbrunnen, with the Staubbach and the White Lutschine, hurrying to join her Black sister."

Perhaps the greatest charm in this half rood of canvas; for in no smaller compass could the impression be conveyed; is the perfect development and relation of all the parts to one harmonious whole, though composed of the most



TURKISH WOMAN



A TURK IN COSTUME



a hissing, bubbling sea of lava, with tongues of flame and clouds of steam rising from fathomless pits to overhanging crags and masses of rock. All this is expressed with studied but not with artistic realism, fragments of rock being blended with painted cliffs on which are dummies and painted figures, presumably intended for tourists, while flash-lights in various colors, with detonation of bombs and crackers, imitate in showman fashion the awful grandeur of an eruption.

Adjacent to the Alpine panorama is the Turkish village, a typical exhibit of the Ottoman empire, spread over a spacious area and arranged in attractive style by Robert Levy, its concessionaire, representing the firm of Saadullah, Suhami and company, Constantinople. Here are no antique castles, no grim weapons or

warriors, no peasants, or peasants' homes; instead are luxurious pavilions and bazaars, a miniature mosque, a theatre, with Turkish sedan bearers, and costly articles of furniture and decoration, all true to the life of Turkey in Europe and Turkey in Asia. At one corner of the village stands the mosque, with its gilded dome 60 feet high and its slender minaret rising to an equal height. It was erected by special permission of the Ottoman government and dedicated with much pomp and ceremony, as well it might be; for this was the first time that a Moham-



TURKISH FABRICS



A ROOM WITH ORIENTAL FURNITURE

medan temple had been consecrated outside the limits of the Mohammedan world.

On the appointed day the muezzin, from his perch in the tall white tower, summoned the faithful to prayers and to the dedication ceremonies. They came from all directions, advancing in long procession some 3,000 strong, headed by a military band. Though accompanied by native musicians sounding their shrill pipes and discordant drums, and by a contingent of Turks in gorgeous uniforms over whom floated the crimson banner of the porte, the majority of the participants were of the Caucasian race. Attired in scarlet fezes embroidered with the crescent, they were popularly known as shriners, and officially as the "Ancient Arabic order of Nobles of the Mystic Shrine," an organization which flourished in Turkey many years before it gained a foothold in the United States, the majority of those who took part in the exercises being members of the Medina temple of Chicago. The procession wound through the village, the men entering the mosque in sandals or without substantial foot-wear, and soon all were at prayer. In his little square shrine, hung with rich tapestry, stood the high priest, and behind him a row of thirteen assistants. The ceremony was of the briefest—merely a recitation of passages from the ritual, in



ENTRANCE TO THE VILLAGE OF THE GERMAN VILLAGE



THE GERMAN CASTLE



which the muezzin and his brethren were the prominent figures, the congregation responding with frequent prostrations, and devout exclamations of Allah! A banquet followed in an adjoining hall; a handsome Damascus blade was presented to the Medina temple by the concessionaire, and the celebration was at an end.

Close to the mosque is the refreshment pavilion, with wide arched veranda, its interior decorated with



SIDE VIEW OF THE GERMAN VILLAGE

silken curtains and the finest of oriental fabrics. Here are served lemonades, sherbets and other Turkish drinks, with oranges, raisins, bananas, tamarinds, and pomegranates. To the south is a small structure enclosing a Persian tent, 160 years old, and formerly belonging to one of the shahs, who pitched it many a day in the hunting ground or the battle field. It represents an immense amount of hand-work, the interior being almost completely covered with figures embroidered in silver, gold, and silk. Here also is the sultan's silver bed of solid metal and most elaborately ornamented, both these priceless treasures being guarded day and night. Near it is a large building in which are exhibited the manufactured and other products of Turkey, this forming the educational portion of the display, while in the centre is its commercial feature, in the form of a grand bazaar with 40 booths. Among the articles offered for sale are tapestries, embroideries, rugs, carpets, silver-ware, filigree work peculiar to the orient, brass-ware, precious stones and jewelry, ancient arms and relics, and in a word whatever is produced or found throughout the broad empire of the porte. Restaurants are grouped in the neighborhood, the café proper supplying the genuine Mocha coffee, and offering the visitor a huge water pipe filled with native tobacco. While thus engaged, he listens to the native band, and later perhaps, visits the native theatre, where the favorite performance is "A Wedding in Damascus," in which, after all misunderstandings have been settled and the wedding festivities are actually in progress, the women appear in a series of dances.

In front of the bazaar are reproductions of two ancient monuments, one, near the refreshment pavilion, of Cleopatra's needle, and the other near the café, representing the Serpentine column. The latter was fashioned of three intertwinning serpents, and was erected at Delphi to commemorate the victory of Plataea. In rear of the bazaar are cottages in which men and women are engaged in the manufacture of rugs, laces, embroideries, brass-ware, and other industries pertaining to the country. The largest of these buildings is a candy factory and salesroom, the most popular of oriental sweets being known as Rahat-el-Lo-koom; that is to say, comfort of the throat.

But attracting more attention than anything else in the village, is a small, white-bearded man whom Mark Twain introduced to the world many years ago. It is related in *Innocents Abroad* how the author selected him for his guide through the narrow, tortuous streets of Constantinople. Although he could speak English, the man was rather of taciturn mood, and Twain was so much interested in what he saw that he did not care to talk. Finally, after they had travelled together for a while, the latter



ENTRANCE TO THE VILLAGE



PERSIAN DANCING GIRL



ENGRAVING ON BRASS

asked the guide his name. "Moses," was the reply. Now, having always lived in Constantinople, Moses was not specially interested in its sights, and while Twain would be standing before some gorgeous mosque or bazaar, as though rooted with the intensity of admiration, his guide would still keep plodding on. The humorist was so often distanced in this unequal contest that he dubbed him "far-away Moses," and thus he was recognized by thousands who visited the plaisance.

The Moorish palace, adjoining the Turkish village on the west, is architecturally interesting, as of the type so familiar and once so widely represented in Africa and Spain. Within it rugs, tiles, bronzes, swords, works of art, and curios are sold by turbaned Moors, who also act as waiters in the local restaurant. Figures in wax give the visitor a clear idea of a people which once played no mean part in the history of the world, and, if inclined, he may become so entangled in an ingenious labyrinth of optical illusions as to imagine a swart-visaged Berber in every corner. There are also about sixty groups in wax on the second floor, the figures being made in Paris, and representing not only European rulers but historic Americans. Scattered through the building are comely women, some in wax and others of flesh and blood, the skilful disposition of mirrors assisting to make the illusions more complete. In a separate chamber is a gruesome sight in the form of the scaffold and guillotine used for the execution of Marie Antoinette, the executioner and attending officials being shown in wax. In the background a painting represents a crowd of the proletariat gloating over her death, and near the guillotine, the blade of which is rusted with blood, is the wicker basket ready to receive the head of the victim.

In contrast with the Moorish palace and the Javanese colony is the German village, adjacent to the latter and covering nearly one sixth of the northern side of the plaisance. All the structures, 36 in number, illustrate the mediæval architecture of that country, and especially of Bavaria. The visitor enters through the arched portal of a square tower, over which is the inscription "To the Golden Tankard." Within, music pavilions and refreshment halls are plentiful,

Edelweiss beer served by rosy cheeked Bavarian barmaids, with bare, well-rounded arms, flowing freely, not into golden tankards but into capacious beer glasses. Two military bands are on the grounds, the cavalry band in white uniforms, and the infantry in red and blue, thus combining the national colors of the United States. The latter has 48 pieces and is composed of army veterans, its leader being Eduard Ruscheweyh, who served in the wars with Austria and France, and for many years was royal musical director of Prussia.



ORIENTAL DANSEUSE



IN STREET OF CAIRO

On the left of the entrance





MARRIAGE PROCESSION

is the rich and massive façade of a Hessian town-hall, with carved outer staircase—the traditional Bridal stairs. It has a high slate roof, and over its broad gate is sculptured on the frieze the date of erection as in the original—"Anno Domini, 1585." Here are several typically furnished peasants' homes, with figures in characteristic raiment and specimens of home manufactures. The huge base timbers and the crude painting and frescoes are exact imitations, as also are the tall windows of stained glass, venerable in appearance. From the balcony depend festoons of woolen cloth,



NUBIAN DANCING BOY

spun centuries ago upon hand-loom, the simple designs worked with flaxen threads. The main body of the hall, however, is occupied by the museum, many of its rarest articles being contained in models of colleges and others in plain cases. The array of bronze masks and images carries one back many hundreds of years, Bavaria contributing many curious head-dresses and jewels, with here and there a relic of Columbus' times. Huge silver chains and iron rings, jewelled head-gear worn by the brides of old, and antique caps of golden braid donned by wealthy matrons stand side by side with wooden clothes-beaters and book-jacks ingeniously carved, and huge powder flasks of bone ornamented with silver.

The museum forms a portion of a valuable ethnological collection, which is substantially completed in the picturesque German castle towering aloft from the centre of the village, surmounted by turrets and spires, and surrounded by palisades and moats. Reaching the entrance tower beyond a model drawbridge, the visitor may take either of two passage-ways. Following one of them, he comes to a large wooded garden, provided with tables and chairs, restaurants, and pavilions for the bands already mentioned. Here one may partake of viands served as at the hotel Kaiserhof, of Berlin, to the sound of music provided by Herman Wolff, the director of the Philharmonic society and army inspector of Prussia.

Entering the castle, through its old sixteenth century



THE TEMPLE OF LUKSOR



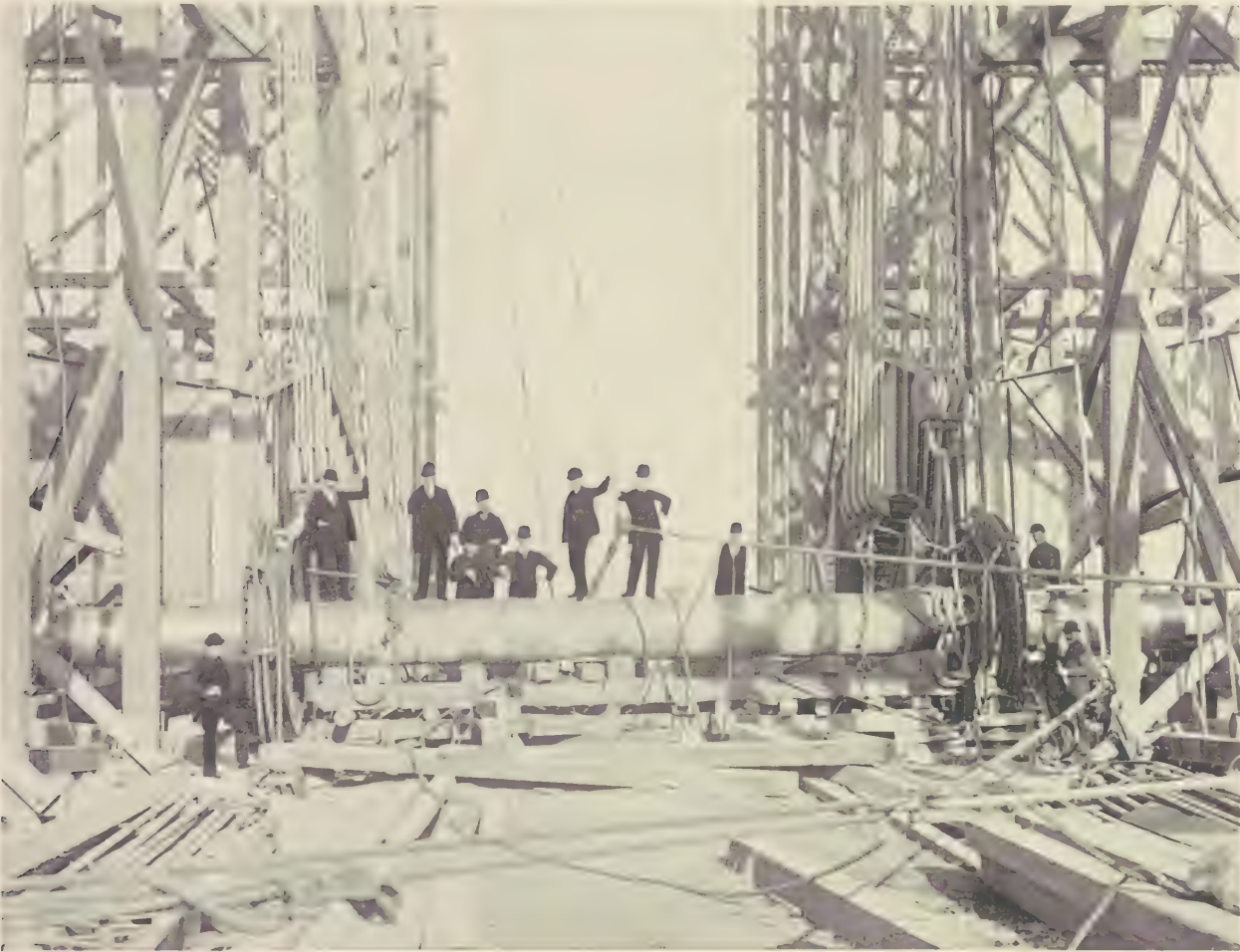
A COSMOPOLITAN THOROUGHFARE



THE FERRIS WHEEL



gateway, the visitor is confronted at the entrance to a museum of ethnology with a group in wax of the national warriors and heroes of Germany. Around an heroic figure of Germania are the eagle-plumed Armenius; the warlike, unlettered genius, Charlemagne; Otto the warrior churchman, who carries a cathedral in his arms; the long-bearded Frederick Barbarossa, friend of the people, and old Kaiser William of United Germany, who was with us in the flesh not many years ago. A foot-soldier of the Thirty Years' war stands on either side of Germania, and here also are representatives of Frank and Roman soldiery. The walls are covered with weapons of early date, with flags taken from the nations against which Germany has warred, and with tapestries and silks of the sixteenth century, when Italy with the looms of Genoa, Florence, and Venice, was in the grasp of Germany and Spain. There are German peasants dressed in gayly colored homespun goods, tinsel, and embroideries glistening with gold and silver threads. They are of all ages and provinces, and it is difficult to believe that they are merely studies in still life. In the hall of Germania are lance and axe heads, arrow



PLACING THE AXLE IN THE FERRIS WHEEL

points, knives, and other weapons, utensils, and ornaments gathered from Roman and German tombs, some crude and simple, others rudely beautiful, and all relics of the days when Teutonic tribes were warring among themselves in the forests of Germany, as yet unbroken to the Roman yoke. These are reproductions from the Berlin museum, mainly collected from the burial places of Saxony, Hanover, Schleswig-Holstein, and Hungary, where the ancient German tribes longest retained their primitive customs.

The chapel of the castle contains knights in full armor, with coats of mail of every variety, from the earliest to comparatively recent times. Old and tattered banners line the walls, in company with rare etchings and paintings. The evolution of armored suits is shown, from the crude chain breastplate to the full steel garment with movable joints, a suit of mail inlaid with silver, bearing the royal arms of Austria, having seen service in the Thirty Years' war. The central figures of this group are two horsemen armed cap-a-pié, the heads and bodies of their steeds being protected with heavy plates as during the sixteenth century. Above this warlike array of the mediæval ages, and side by side with such bloody emblems as the blue and yellow banners of the Burgundian knights, are pictures of such artists of the period as Cranach and Bugiardini, whose themes were tender, soft-eyed children in the arms of Christ or the madonna. Near these are the angels and symbolized virtues which sprung from the brain and soul of Raphael.



In chambers adjoining the chapel are hundreds of single and two-handed swords, with daggers, battle-axes, guns, cross-bows, powder-horns, pistols, and combination guns and spears, grouped in cases hung upon the walls and stacked in various devices. There are the heavy swords of the German tribes—some of them seven feet long,—which the muscular Teutons wielded, and the short broadswords of the Romans, more readily handled and of superior metal. Ivory handled halberts, strangely carved powder-flasks, daggers grooved to contain deadly poison, cross-bows for war and the chase, some with stocks



GEORGE W. F. FERRIS

inlaid with silver and ivory, delicate Italian blades, stirrups, helmets, and gloves are exhibited in endless variety. Here is a gun the stock of which is covered with copper and gold, carried in the sixteenth century by a grand-duke of Brunswick. The cross of Burgundy and the chains of the Golden Fleece appear upon the ivory handle of another, and the sun-wheel of the old German pagans

flames upon sword hilts not far removed from those which bear the Christian cross. A sword with pistol attachment is the weapon which Von Hutten bore when he came to arrest his friend Martin Luther, and near by is the spur of Charlemagne and a box that belonged to the elector of Saxony. Each treasure has a history and is of unquestionable authenticity, the entire collection being so arranged as to show the evolution of arms, the evolution of armor being illustrated in the chapel and of national costumes in Germania hall.

Near the Hessian town-hall are the typical homes of the peasantry, each one large enough to contain the horses, cows, pigs, and fodder, in addition to its human inmates, the ground floor serving for stalls and stables, the first floor for family use, and the hay loft above all. A fantastic specimen of architecture is the flaring roof of a cottage in the Black forest, which descends like the wings of a brooding hen almost to the ground. In winter when the forest is wrapped in a mantle of snow, this cottage is turned into a factory, where painted wooden villages with wonderful figures of quadrupeds and human beings play the leading part. The West-



MACHINERY THAT TURNS THE WHEEL



SECTION OF WHEEL WITH CAR

phalian house is stately and cathedral-like in comparison, having a high pointed roof thatched with straw, and above the gable, horses' heads carved in wood, the tribal symbol of the ancient Saxons. Through its half opened horizontally divided doors comes the pungent aroma of a Westphalia ham as it is carried from the smoke chamber. Diagonally opposite is the Upper Bavarian house of pronounced highland type, with carved doors and window frames, green shutters and wide verandas, with the cross surmounting the gable, closely resembling a Swiss cottage. More rudely constructed is the Spree Forest log farm-house, its gable rafters bearing carved heads of wolves which proclaim that its ancient inmates were the fierce and warlike Vandals.

The German village comes nearer to being an expression of national sentiment than any exhibit made by the empire. The project was warmly supported by the government, and the list of its attractions is

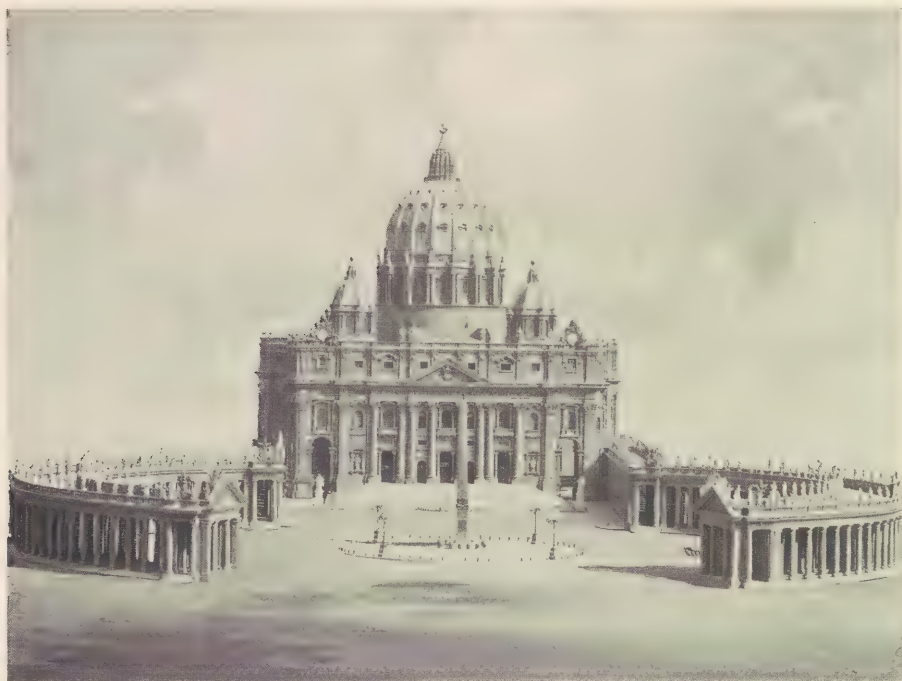
included in the official catalogue issued by the German commissioners. For this unique and interesting display, credit is due to Ulrich Jahn, of Charlottenburg, a pupil and friend of Professor Virchow. With the financial support



of the German and national banks of Berlin, he organized a company styled the German Ethnographical Exhibition, with a capital of nearly \$400,000, C. B. Schmidt of Omaha being placed in charge of the enterprise in Chicago. The ethnological exhibits are valued at many times that amount, the museum of armor and arms alone being estimated at \$1,000,000. This collection is the result of fifteen years of labor on the part of Richard Zschille, a town councillor of Grossenheim, near Dresden, and a friend of the king of Saxony. The plan and scope of the entire display were matured with the assistance of a committee of artists and scientific men, such men as Professor Virchow, rector of the university of Berlin; Baurath Wallot, the architect of the new German Reichstag building; Eugène Bracht and Von Heyden, celebrated painters; A. Voss, director of the Royal Ethnographic museum, and Cohn, Siemens and Magnus, the Berlin bankers. The architectural plans were made under the direction of Carl Hoffacker, a professor in the Berlin Art academy, and the village was built by the firm of Philip Holzmann and company of Frankfort-on-the-Main, all the wood-work being of German material.

Few nations have developed their inner culture more fully than the German empire. Though many tribes may have broke loose from the strong ties of the ancient Germanic family, each adhering tenaciously to tribal peculiarities of thought and custom, there nevertheless has obtained among them all a unanimity of sentiment, a warm instinct of kinship, which has at last ripened into the empire of United Germany. As the tribal

peculiarities are in no particular more sharply manifest than in variety of costume and domestic architecture, the management of the German village has fully illustrated, and in most graphic and interesting form, these phases of national life.



MODEL OF ST PETER'S

engaged in it being Ottomar Anschuetz, of Lissa, Prussia, whose tachyscopes are exhibited in the Electricity building, and Eadmund Muybridge, who displays some of his results in the hall on the plaisance. With photographic apparatus so perfected that an exposure of one ten-thousandth part of a second is sufficient for a truthful impression, the labors of such men have been prolific of results. The step of a man in the act of walking has been photographed at various points of motion, as well as the jumping and galloping of a horse, the climbing of a monkey, and the flight of a bird, with its motions upon the ground. Thus long established ideas which have obtained even among the most observant artists have been corrected, these investigations being of interest and value to the scientist as well as to the world of art.

Adjoining this exhibition is the Persian palace, which reproduces a portion of the royal residence of the shah of Ispahan, the large hall on the first floor being decorated with all the richness of coloring characteristic of Persian taste. On the second floor are a restaurant and tea house, the beverage being brewed in large urns and containing floating slices of lemon, as in Russia. In various booths near by are weavers of carpets, rugs, shawls, and plain and striped silks, for which the Persians are famous. There are also makers of satins, brocades, and velvets, manufacturers of bronze work, engravers in brass and other metals, cutters and polishers of gems, and those who prepare the candies and sweetmeats of which Persian women love to partake. Although the café contains, besides its black-eyed waiters, a number of dancing-girls, there is a special hall in another part of the palace, in which are entertainments of a questionable character. In the theatre a troop of men supply the amusements, performing in a small pit, where magicians thrust knives and swords into various portions of the body, and athletes, tall and swarthy, swing clubs, wrestle, and lift and throw heavy weights. These with

Zoöpraxiscopic hall is the building of formidable name in which are given illustrated lectures on animal locomotion as applied to art. The discourses and the pictures are both entertaining and instructive, and through them one may learn surprising facts as to animals in motion and the positions which they assume. Investigation in this line is a speciality which has been pursued within comparatively recent years, among the most prominent of those who have



IN THE AUSTRIAN VILLAGE

sleight-of-hand men, merchants, waiters, danseuses, artisans, and others, number about seventy, and make the Persian building a lively place for those who care for such entertainments.

Beyond it, to the north, are the manifold sights and noises of the street in Cairo, whose plastered walls, irregular buildings, and babel of sounds do not at first create an agreeable impression, though when the picture is examined in detail, the contrast between the unsightly and the picturesque is not without interest. The principal entrance is through the broad, low, eastern portal, where at once the visitor finds himself in the ancient African city. Here from the brick courtyard and the tiny booths one gazes down the street, with its curious bay-windowed houses, and bazaars on either side, and above, the graceful minaret of the mosque. Visitors are scattered more plentifully among the

Arabs, merchants, Soudanese, donkey boys, performing monkeys, and snake charmers, than in Cairo itself; but here is a thoroughfare on which are people of many races and proclivities. Arabs, Soudanese, Egyptians, and Europeans have all their separate quarters in Cairo; but in the city as in the street they sometimes wander abroad amid the cosmopolitan throng. It is when the wedding or the birthday procession passes along that the populace turns out in force and conjurers, astrologers, snake charmers, and dancers strive to win admiration and reward. The wedding procession is of daily occurrence, pert Arabian and Soudanese children running ahead as heralds, and



OLD VIENNA





NEAR THE CHINESE QUARTER

the torch-bearer waving aloft his sign of office. The oriental band brays in honor of the event, which is succeeded by a parade of donkeys and half-naked wrestlers, while swordsmen with scimitars and shields indulge in special contests of skill. Jesters, mounted upon camels and fantastically dressed, slap each others' faces, and do as would their brothers at Barnum's or Forepaugh's circus, while after all comes the central figure amid the commotion—the coy bride, hidden under a rose-colored canopy, preceded by her bridesmaids and an unladen camel gorgeously caparisoned.

The mosque, around which swarms so much of this heterogeneous throng, is a substantial counterpart of that of the sultan Kait Bey, all save the minaret, which is a reproduction of the tower above the mosque of Abou Bake Bazhar. The massive doors of this house of worship are rich in metallic ornamentations and gorgeous in coloring. Entering the sanctuary the scene is one of oriental splendor, softened by the graceful draperies and the mellow light shed by its many pendent lamps. Regular services are held every Friday at noon, but five times daily the priest from the gallery of the minaret summons the faithful to prayer. At daybreak, just after high-noon, in the middle of the



ENTRANCE TO CHINESE VILLAGE AND THEATRE



TEA HOUSE





JOSS HOUSE

pavilion, its lower story pierced with arched windows, while above are light arcades covered with arabesques and crowned with balconies. In the Kuttab or mosque school the children are taught to read the koran, and there is a model school in operation, the upper room of which is thrown open to visitors as a convenient observatory. Near by is a handsomely decorated theatre, where dark-eyed Egyptian girls in gauzy garments, with great golden ornaments in their head-dresses and tiny cymbals upon their fingers, dance in dangerous proximity to sharp swords and lighted candles. The semi-circular stage is lined with divans and on either side are richly curtained rooms, these for the dancers and musicians.

Through the handsomest portal in the street one passes into the Okaka, a quadrangular court or arcade. Here is the commercial quarter or exchange, more pretentious than the place where shopmen spread their wares, in what are little more than niches in the house walls. On all sides of the court are pointed arches, one above the other, every quarter of the Nile country contributing to the varied and picturesque display. Ivory, jewelry, pottery, and brasswork, embroidery, ancient gold and silver coins, Soudanese arms and draperies, mummies, beetles, national costumes, lotus soap, toilet appliances, and myriads of household articles are offered by merchants in gay attire, both goods and salesmen adding to the architectural attractions of the court. Many of the articles here contained are being manufactured in the houses, where are makers of slippers, silk-weavers at their looms, fez and tent-makers, embroiderers, smiths fashioning the filigree work of the Soudan, potters turning and decorating jars, candy makers, manufacturers of musical instruments, and carvers of wood, ebony and ostrich eggs.

A noted character in Cairo street is Hadj Hamud Nuir, a fortune-teller and descended from a long line of seers, the first of his family sitting in the shade of the sphinx and bidding Egyptian damsels beware of white men who came to them from the Red sea with promises which they never intended to fulfil. He is a dignified personage, but somewhat eccentric in his habits, conning his books during the witching hours of night, when all others are sound asleep.

Around the court in the west end of the street are the ancient temple of Luxor and the section given over to Soudanese and Nubians. The

afternoon, immediately after sunset, and at nightfall is heard the chant: "God is great; God is great. There is only one God, and Mohammed is his prophet. Let us pray; let us begin. God is great; God is great."

Across the street from the mosque is the restored dwelling of one Gamal-el-Din-el-Yahbi, a rich Arab of the seventeenth century. Its façade is more elaborate, and its balconies, which extend from the upper stories, are larger than are found in the average residence. The doors are inlaid with ivory and exquisitely carved, while the gilded ceilings, mosaics, elaborate draperies, and beautiful rugs which adorn the living apartments tell of luxury if not of refinement. Beyond this aristocratic mansion is a long row of shops and dwellings—bazaars below, and living apartments above—a turn in the street leading to a marble



CHINESE IDOL





ALGERIAN AND TUNISIAN VILLAGE



AN ALGERIAN HOME

and Nubians, living in bark huts, oval in shape and thatched with split reeds or corn-stalks. The former, with their sword dances and mimic contests with long-bladed weapons, revive memories of the campaign undertaken for the relief of General Gordon. A large portion of the contingent came from Khartoum or its vicinity, and within the walls of Cairo street is one who performs a warlike dance in which the long Egyptian gun, often levelled at the soldiers of the British army, is handled with telling effect. The dancing of girls and children, some of the latter little more than infants, is merely a series of writhings and contortions offensive to taste and disgusting to look upon. The Boushreens are the most savage of the tribes whose representatives come from Soudan, while the Nubians appear

to conform more to the appearance and costumes of the Egyptians. The women have pendants of gold and silver in their ears, such as are worn by their sisters farther to the north, with an abundance of bracelets around arms and ankles.



A LADY OF HIGH DEGREE

About midway in the plaisance, and the most conspicuous object therein, is the mechanical wonder of the Fair, one that is to the Columbian Exposition what the Eiffel tower, yet standing in the Champs de Mars, was to the Paris Exposition of 1889. This is the Ferris wheel, named after its artificer, G. W. G. Ferris, president of a Pittsburg engineering firm whose specialty is the construction of bridges. It was not until December,

1892, that the concession was granted, and in the following month the materials used were still in the form of rough lumber and pig iron; on the 20th of March ground was broken for the foundations, and on the 20th of June the completed wheel began to revolve. The structure consists of two wheels some 30 feet apart and connected by iron rods and struts, which nowhere come within 20 feet of the periphery. It is 320 feet in circumference and 30 in width at the outer rim, rising from a platform raised 15 feet above the ground. The rim of each wheel is composed of a curved, hollow frame of iron, within which is another wheel with lighter frame. In the centre of the circle is the iron axle on which it turns, nearly three feet thick and 45 in length, the entire mass resting on a pyramidal framework at either side, and held together by steel rods, extending in pairs from the axle to the circumference, where they are 13 feet apart. Viewed at a distance these rods appear like spider webs, giving to the fabric, with its freight of human beings, a dangerous and unsubstantial aspect; but more clearly to explain its mechanism, it may be stated that the interior portion of the wheel is constructed as in a bicycle, with the difference that the former hangs by its axle while the latter rests on the ground,

temple is a close copy of the one near Thebes, built about 1,400 B. C., and afterward the principal seat of ancient worship. Two obelisks stand in front, the exterior walls being painted to represent the warlike deeds of the Rameses, during whose dynasty the glory of the ancient faith was restored. The third monarch of that line is also represented by two mighty figures at the entrance, and the inner walls are depicted with events in the lives of the Pharaohs, whose dried and embalmed remains are represented in rows of cases which extend to the altar of Isis at the farther end of the hall. Rameses III is first in the line of mummies, and back of the altar are the tombs of Thi and Apis the Sacred Bull.

North of the temple are the Soudanese



ALGERIAN PEASANT





ALGERIAN OFFICIALS

with a slight creaking sound, but almost without perceptible motion, except what is apparent to the eye, the car starts on its twenty minutes' trip. At first the passenger may not be perfectly at ease, though assuming an air of careless unconcern; but in each compartment is a conductor, who by calling attention to objects of interest, banishes the fear of what might happen should the car break loose from its moorings and launch into space. Apart from a little rattling of windows and a gentle swaying motion, as of a vessel rocked on a summer sea, there is nothing to unsettle the nerves of woman or child, though on the first voyage many close their eyes. As the ascent is made, one first looks down on the roofs of the plaisance villages, and then toward the north, the south, and west the great mid-continent metropolis lifts into vision in fleeting and kaleidoscopic vistas. Eastward are the temples of the Fair; beyond, the blue waters of Michigan; and still beyond, the opposite shores of the lake, some 50 miles away, are dimly outlined on the horizon. As the huge, revolving orb approaches the apex of the circle, the mammoth structures of Jackson park dwindle into liliputian proportions, the park itself into a plaza, and its throng of sight-seers into a pygmean host. Then from an elevation of 250 feet, almost on a level with the summit of the dome which crowns the Administration building, the descent is smoothly made, and the visitor has completed his initial tour on the Ferris wheel.

By night the trip is even more attractive; for the great wheel is ablaze with 2,500 electric lights attached to the outer rim, to the inner circle, to the spokes, the portals, the enclosing fence, and wherever else such lights could be placed to advantage. Far above the myriads of lamps that illumine the city of the Fair, towers this rainbow of revolving light, seen afar on prairie and lake, like the bow of scientific promise set athwart the blackness of the night. As with the entire Exposition, by day its aspect is imposing; by night it is beautiful, with an almost supernatural beauty, as though in this Midway plaisance with its nondescript buildings, its babel of tongues, its discordant music, and raucous outcries, were placed by way of contrast a glimpse of fairyland, a vision of the Arabian Nights.

As to the mechanical part of this stupendous fabric it may further be said that, while itself of no great practical value, it is a step forward and a very decided step, in the science of engineering. Both in the Eiffel tower and the Ferris wheel are more or less adapted the principles of the cantilever bridge; but while the former was merely a bridge set on end, the latter was a bridge whose extremes were united in the form



A TUNISIAN VIOLINIST



ALGERIAN MUSICIANS





A SOUTH SEA ISLAND GIRL



DAHOMEANS

that the Pittsburg engineer bethought him of his wheel, which while serving as a medium of observation for passengers, would stand as one of the architectural monuments of the Fair. To insure its safety, each bolt and beam, each rod and girder was thoroughly tested, and the strain at every point was calculated with the utmost nicety. Early in the season a hurricane with a velocity of 100 miles an hour passed through the structure without the least symptom of damage, save that on the night of the hurricane the cars ran somewhat bare of passengers.

Within the shadow of this mechanical triumph of the Exposition stands a small wooden building which contains a model of the Eiffel tower, 20 feet in height, with a miniature representation of its environment. In this were used 650,000 pieces of metal, as in the tower itself, the elevators being in constant motion, while 1,000 incandescent lights are displayed on the model and on the miniature grounds and streets adjacent. Groves of trees are woven in silk, and at the foot of the structure an electric fountain plays from a basin of marble decorated with statues and vases, the entire reproduction being true to the original, and costing as is said \$100,000 to place it in Jackson park.

Among the most interesting structures in the plaisance, though one that appears somewhat out of place in this pleasure ground of the Exposition, is a model of St Peter's, an exact reproduction of that



AN ESKIMO BABY

of a revolving circle, in a structure solid and safe in every component part, with a total weight of more than 1,100 tons, aside from its supports, and yet with workmanship in parts almost as delicate as that of a chronometer. When a novelty was demanded for the Columbian Exposition, one that should be at least as striking and original as the tower, many plans were submitted, but none that fulfilled the conditions. Then it was



monumental edifice on the scale of about one sixtieth of the original. Begun in the sixteenth century, the model was completed in the eighteenth, from drawings by Michael Angelo, San Gallo, Bramante, and other architects and artists of world-wide repute. After being in possession of several of the pontiffs, it became the property of Ludovic de B. Spiridon, by whom it was tendered for exhibition purposes. It is 30 feet in length, 15 in width and height, and constructed of carved wood covered with a substance closely resembling marble. All the more imposing features, together with the minutest details, are faithfully reproduced. There is the great dome, 630 feet in circumference and more than 300 above the roof, completed in 1590 in the pontificate of Sisto V, who kept 600 men at work upon it day and night at an annual outlay of 100,000 golden crowns. Beneath it is the canopy above the high altar and the tomb of St Peter, weighing nearly 100 tons and fashioned



of bronze stripped from the Pantheon. There are the capellas Clementina and della Pietà; the chapels of the Holy Sacrament and the Madonna, and the sacristy which Pío VI erected, with its fluted pillars from Hadrian's villa. In the centre of the court inclosed by the colonnade is an Egyptian obelisk, 130 feet high, and carved from a single piece of solid marble. There is the vast, central nave, with its imposing arches and aisles, its shrines and sanctuaries, and near the central door, the slab of marble on which the Roman emperors were crowned; all these and other features reproduced in miniature from this masterpiece of mediæval architec-

ture, the execution of which cost \$60,000,000 and extended over the reign of three and forty pontiffs.

In the building which contains the model are portraits of the popes from Gregory IX to Leo XIII; with the coats of arms of pontiffs and cardinals. There is a fac-simile of the bronze statue of St Peter, near which in miniature is Trajan's column from the Roman forum which bears his name. Of other cathedrals, chapels, and monuments there are also models, as of the cathedral of

Milan, in dimensions second only to St Peter's and with no superior in architectural and decorative scheme. The St Agnese church is here, erected by Innocenzo X in 1664, and there is the pantheon that Agrippa completed a few years before the Christian era, and which Boniface IV consecrated in 609. By night the entire fabric is illuminated with incandescent lights, and in attendance are men armed and uniformed in exact imitation of the Vatican guards.



IN THE LAPLAND VILLAGE

Second in interest to the German village, and second only, is the Austrian village, or as it is more commonly termed, "Old Vienna," reproducing in part its ancient market place, with portions of the wall that encircled the city and one of its gates, flanked by gray towers and guarded by a portcullis. Opposite the entrance-way is the rondello, the original of which was erected in 1622, and so-called from its large low windows built in the form of towers, a typical feature in Austrian architecture, and one largely adopted even at the present day. A conspicuous object is a model of the rathhaus or town-hall, completed in 1799, and one of the

oldest structures in the metropolis. There is a church where services are held as at home, and there are some thirty houses and stores, representing, with the aid of carpentry and scene painting, the fronts of venerable buildings, so far at least as the exteriors are concerned. A clever architectural delusion is created by painted stucco fronts, with inscriptions in old German and Roman text. On one of them, on a dark background inclosed in scroll work, is the inscription, "Ano D. M. 1587." On another, bearing the date of 1590, is a picture of children at play, and on a third a virgin and child are surrounded by a halo of glory, beneath them the words "Soli Deo Gloria."

A feature of Old Vienna is its restaurants and cafés, its beer garden, and its daily concerts by the emperor's band. Near the entrance is a favorite resort conducted by the owner of vineyards whose products are of European celebrity. At the western end is a café where the infanta Eulalia partook of refreshments served by a former apprentice to the court confectioner at Buda-Pesth. On the southern side is a booth where the Voslau-Goldeck wines are displayed, a favorite brand among the clubs and hotels of the United States.



CAMP OF BEDOUINS

The beer garden is somewhat of a novelty, occupying three sides of a square, with tables scattered around a music stand, with bill of fare in German script, and Viennese waiter-girls of whom none can speak a word of English. Each one carries a satchel strapped to her waist-band in which her money is kept, and as flirting or conversation with guests is forbidden, the only rivalry is as to the number of glasses of beer which each one can carry without spilling their contents. The shops are stored with articles of jewelry and bric-a-brac, one of them especially displaying excellent workmanship in gold and silver, enamel and rock crystals.

In the rathhaus several of the chambers are fitted up as a museum of the Hellenic period, and here are portraits in wax nearly 2,000 years old, exhumed not many years ago from Egyptian mausoleums. The pictures come from the tombs of Rubijat in the ancient province of Memphis, where, after his conquest of Egypt in the year 320 B. C., Alexander left behind him artists whose names have perished but whose works survive. They are uniform in size, about 14 by 8 inches, and though merely executed on thin boards in colors of wax, probably laid on with knives or other steel implements, are not without artistic qualities. In Berlin they excited much interest and were widely copied, one of the foremost of German artists remarking, "We can paint as well, but no better." But not all are of equal merit, some being the crudest of amateur productions, and a defect that is noticeable in most of them is the exaggerated size of the eye, due to over-coloring of the lids with a view to increase the effect.

The subjects represented are of course unknown, some being portraits of Egyptian and others of Syrian and Phœnician personages; but as a rule of light complexion and of no special race type. Among the best is



one of an aged man of earnest, intellectual features, lustrous eyes, and finely chiselled mouth, on his shoulder the stripe which is often noticed in pictures unearthed from Pompeian ruins. This was copied by Meissonier, who pronounced it one of the finest portraits he had seen. Another painting is of a priest of Isis, on his breast the golden badge worn by the dignitaries of that ancient order. A third is of Cleopatra, as represented on the faces of Egyptian coins and with features almost as homely. More comely of aspect is the head of a girl, with symmetric outline and head-dress of purple, showing that the wearer belonged to some family of exalted rank. Finally there are small wooden boards which served as tomb-stones for mummies, inscribed with Greek characters such as were used in the second century of the Christian era.

Adjacent on the east to the Austrian village is the Chinatown of the Fair, containing under one roof a bazaar, restaurant, theatre, museum, joss-house, and elsewhere, a tea house and garden. The building is of typical Chinese architecture, 150 by 100 feet, 80 in height, with bell-shaped towers and minarets painted in



ARABIAN HORSEMEN

prismatic colors, beginning with the violet hue of the rainbow. In the bazaar are silks and embroideries, toilet appliances and table ware, with other articles such as are offered for sale in Chinese stores of the better class. In the restaurants meals are served in Mongolian or American style, the former including many strange but not unpalatable dishes, prepared and cooked in mysterious fashion. Here one may partake of the regular fare of the Chinaman; a dish of rice and vegetables, with perhaps a few small pieces of meat or fish; or he may order an elaborate dinner, with courses innumerable and savory, tempting viands, so they be not too closely scrutinized.

But the theatre is the centre of attraction; not for its amusements, its acting, or its equipments; for in these there is little worthy of note; but for the oddity of the performance and for the nature of its themes. In China, as in ancient Greece, the drama is a national and in part a religious institution, controlled by law and forming a prominent factor in religious festivals. Most of the plays are of an historic character, but with little attempt at delineation of character, and with nothing of psychological interest. As in Chinese literature, the pervading tone is morbid and ultra-pessimist, virtue in woman and honor in man being conceded only to a few. But this may be no very unjust aspersion; for here, as has been said, "is a country where the seat of



THE ARABIAN HORSE AIGME

lightning change artists, wearing all the garments needed for their several parts and changing them as required. Thus a man transforms himself from a hero into a villain by simply discarding his suit of blue and standing revealed in green, while a mandarin of the red button who is about to personate an angel, does so by merely changing his pantaloons. A soldier appears on the stage intent on rescuing his betrothed from a band of Tartars, and presently comes to a river which he can only cross by swimming. For this he prepares by stripping to his under-garments, and after standing for a moment as though posing for the nude, ducks his head and disappears through a convenient exit. A moment later he is seen in front of the footlights, dripping with water, and resuming his attire and his armor, sets forth with waving sword in pursuit of the foe.

No women appear on the stage, these being represented by female impersonators in raiment of gorgeous hue, their cheeks thickly coated with pink and white paint, and on their lips the same meaningless, stereotyped grin. The leading impersonator is a man of national repute, with intelligent features and searching glance, swift and bright as the falcon's. Pang is his name, and at this so-called Wah Mee opera house Pang does very much as he pleases; the more so as there is no call boy and no cue save that which dangles from his head. Seated on a box; for chairs are no part of the property, he leisurely smokes his cigarette while chatting with his fellow histrions. Presently be-  
thinking him that it is time to

honor is the stomach; where the roses have no fragrance and the women no petticoats; where the laborer has no Sabbath and the magistrate no sense of integrity."

Six months is no unusual time for the acting of a Chinese drama, even with daily performances; but as this represented the entire term of the Fair, the plays must of course be condensed. No scenery is used, and each actor appears to be his own manager and his own property man; so that on this mimic stage, as on the stage of life, it is the unexpected that always happens. Beards are a feature in the performance, good men wearing long white switches, and those who are evil disposed appearing in whiskers of brown. But these are changed as occasion requires, especially for "blood and thunder" effect. The leading players are what are termed



ARAB GIRL ON CAMEL





TOWARD THE EAST OF THE PLAINANCE

appear on the stage, he slowly discards his attire and arrays himself in female garb. Then proceeding to the mirror, he contorts his features into the required expression, and wetting his palms transfers to his face with nimble touch the pigments placed before him. Finally he dons his wig, gives his skirts a final shake, and a moment later his high falsetto voice is ringing through the Chinese theatre.

That "the religion of God is one, but the religions of man are many" was never more forcibly exemplified than in the Midway plaisance, and especially in the Chinese joss-house, with its multitudinous idols and graven images, suggestive not only of Confucianism but of Buddhism and Taoism. Joss is the central figure, and there are many josses, the chief one occupying the post of honor enthroned in hand-embroidered robes. In front of him are incense burners, cups of tea for him to drink, calabashes of water for his toilet, and vases filled with huge artificial roses, while prayers and praises are inscribed on the sides and background of the dais. Lions and griffins guard the doors and keep watch beside the shrines; and illustrating episodes in Chinese history are



A WARLIKE ARAB

figures in wood and clay, with lanterns in many fantastic forms. Here and in another gallery is a collection of curiosities, with literature and works of art, or art applied to objects of common utility. Among them is the great dragon of China, 36 feet long and mounted on a pedestal, with mirror-like eyes and scales of burnished brass. Then there are umbrellas for the josses, with other appliances for their comfort and protection. On a large screen is shown a plough of primitive pattern, fashioned of two bent pieces of timber, with share of wood roughly tipped with iron, and harness of plaited grass fitted to the heads of oxen. A scythe for cutting rice, shaped like the letter V, and with a blade on one of its sides, is a no less ancient implement, one probably in use at least four centuries before the Columbian era. Finally there is the most expensive flag on the grounds, costing, it is said, \$3,000, hand-embroidered in silk, and designed for presentation to the emperor.

On the opposite side of the plaisance is the Algerian and Tunisian village, where are reproductions in miniature of streets and bazaars, with fountains and ornamental gardens, a concert hall, a Moorish café, a Kabyle hall, and the houses and tents of Arabs. Most of the buildings are covered with tiles imported from northern Africa and richly glazed and colored; in many are embroidered hangings and other interior decorations,





GENTLEMEN ARABS

and in not a few, music is rendered by native artists on instruments of native manufacture. Of the two concessionaires one is a medallist of all the international expositions held since 1865, winning at Paris in 1889 the highest award for an exhibit of similar character.

In the bazaars are many curiosities side by side with most of the commodities known to the world of commerce, from gems and jewelry to long barrelled muskets and old fashioned flint-lock pistols. There are scimitars whose finely tempered blades are damascened in gold with passages from the koran, and whose hilts are aglow with precious stones. Of daggers there is a wonderful collection in every conceivable pattern, from such as are worn as ornaments to those intended for more deadly work, some of them poisoned and kept in a case by themselves. There are brocades embroidered with silver and gold; the daintiest



ARAB CHIEF

of cushions and table-covers with tracings arabesqued in golden threads; laces of film-like fineness, and tissues tasselled and tinted in every hue. In one of the tents cotton cloth is being woven by native women seated on the floor, and elsewhere jewellers are at work, fashioning rings and bracelets. Perfumery, with attar of roses, sweetmeats, and seraglio pastilles are offered by dark-eyed damsels swart of complexion but shapely of form; these and many other articles intended to delight the eye and deplete the purse.

Around a Bedouin camp, suggestive of desert life, camel drivers are shouting at their stubborn beasts, which refuse to rise when too heavily burdened. Not far away snake-charmers are swearing by Allah that their serpents are the deadliest of their kind. Conjurors are prepared to measure their skill against all others of their calling, one of them a dark Kabyle Arab making his lunch on living coals of fire. There are swordsmen and swordswomen, two of the latter also from Kabyle, each fencing with a scimitar in either hand, and picking a card from the girdle of her lightly-clad opponent without symptom of injury or fright. Entering the café, richly furnished in oriental fashion, the visitor may partake of light refreshments, as ices, confections, and cooling drinks; but here no intoxicating liquors are sold, and there are none within the village.

The concert hall is the favorite resort; not for its music but for its dancing-girls, who are beauties in their way, though with strongly marked features and somewhat too plump of outline. Their attire is modest and not without elements of the picturesque; for the Algerian dancing-girl wears clothes, much more of them

at least than the Parisian coryphée, and here is no unseemly display of tightly hosiered limb. Most of them are attired in skirts that reach to the ankle, with loose embroidered waists of silk and bolero jackets spangled with tinsel ornaments. From a bench where all are seated side by side with the orchestra, one of the damsels steps forward and begins to dance, swaying her lithesome form in rhythmical fashion, at first slowly and then in accelerated measure. As the orchestra warms to its work her figure appears to tremble and undulate, as though in an ecstasy of delight; for the motion is rather of the body than of the feet, yet agile and far more graceful than the pirouetting of a première. As a rule only one girl dances at a time, each introducing some special feature, while the rest look on with critical eye and applaud when applause is deserved. Among the most pleasing is the scarf dance, where the per-



SIOUX CHIEFTAINS

former waves scarfs above her head while posing in symmetrical attitudes. But there are other dances, as the sword dance and the torture dance, the latter executed by men, too revolting to be witnessed or described.

Dahomey has a village on the plaisance in the form of a hollow square adjoining Old Vienna, its huts built in native fashion, with rough mud walls thatched with the bark and boughs of trees and with wooden



floors and windows. There is little furniture in these rude habitations and there is not a single pane of glass, the inhabitants sleeping on the floor rolled in skins or coarse blankets of home manufacture. One of the huts, an open structure, serves as kitchen and dining-room, where men and women take their meals *al fresco*. Here



CHIEF RAIN-IN-THE-FACE

is a modern cooking stove—about the only thing that is modern amid this African community. Other buildings serve at once as workshops and dwellings. In one lives the village blacksmith, whose principal business is the sharpening of spear heads and the repairing of the spikes which protrude from Dahomean war-clubs. This he does seated squat on the ground in front of his domicile. Elsewhere a man is stooping over his embroidery; for in Dahomey this is the work of men, the women, if not nursing their babies, going forth to till the soil or to fight.

In the centre of the enclosure is the theatre, if such can be called a large, open shed, unwallled, with thatched roof and floor of rough planking. Here is the strangest sight among all the spectacular wonders of the plaisance. At one end are grouped the musicians, all of them Dahomeans, all lean and lank, and all supremely hideous. They wear nose and ear-rings of metal, and as little clothing as decency permits, their dark, shining bodies showing the scars of many a hard-fought battle. Seated on the platform is the king, a coal-black potentate, sleepy and fat, with thick, bushy beard and head and jaws like a bull-dog. All day long he sits dozing with half-closed eyes and changeless expression of face, if his face can be said to have any expression save that of ferocity and lust. But leaning forward with his hands resting on a cane, and a slave holding an umbrella above him, his majesty enjoys the music and dancing more perhaps than anything else

in life, unless it be the cutting off of heads.

The instruments are as grotesque as the performers, and some of them are fearfully and wonderfully made. The best is a stringed instrument, resembling somewhat the zither seen in the Tyrol, but of ruder workmanship. There is an orchestra of drums and bells, with a single flute, a rattle, and an ivory horn of most primitive pattern. The last is used for giving signals by the warrior who keeps guard over the village, and is similar in shape to the brazen war trumpets used by the ancient Kelts, such as have been exhumed from the bogs of Ireland. There are other horns of wood; with stones shaken in a bag of skin, producing sounds like the hissing of serpents, and vessels and disks of copper clashed together like cymbals. The singing is much better than the instrumentation; for the Dahomeans have a certain knowledge of harmony, and their dances are accompanied with choral song as well as the beat of drum.



SITTING-BULL'S LOG CABIN



A BRAVE OF THE INDIAN VILLAGE

The drum-major opens the performance with gentle, rhythmic tapping of drum, rapidly increasing in tone. Then another drum is heard, and presently the clashing of a cymbal, the sound gradually gaining in volume until all the musicians are hard at work. As the concert opens, the men and women crouching in the centre of the floor, some 30 in number, are aroused from sleep or stupor, and rising to their feet, begin to beat time to the music. When all are ready the war-dance or march begins at a signal from their leader. Forward and backward passes this motley crew, brandishing war-clubs and grinning as only Dahomeans can grin. Louder and yet more loud grow the beating of drum, the blast of horn, and the clash of cymbal. Then the posturing begins; but in this there is nothing of the graceful or sensuous; simply a contortion and quivering of limb and body, with swinging of weapons as though nothing would delight them more than to kill and destroy. It is in truth a barbaric spectacle, and the more so as many of the performers are women, the amazons of western Africa, trained for the service of the king and esteemed as the choicest of his troops.

From the Arctic zone there are also two Exposition colonies, one of Eskimos from Labrador, and the other from the portion of Lapland near North cape in Norway. The former is likewise termed the Innuït colony, and consists of several families, each living in a cabin covered with moss or bark. There was also a snow



house during the earlier part of the season, and in a topek or lodge are kayaks or canoes, with paddles, harpoons, nets, sleeping bags, and all other articles needed for the outfit of an Innuït hunter. Within the enclosure is an arm of the lagoon, where are illustrated Eskimo methods of boating, fishing, and seal hunting; and on one side is a pen for dogs, of which many are running around the village, such as are used for draught animals, offensive to sight and smell, but



THE CALIFORNIA OSTRICH FARM



THE OSTRICH J. G. BLAINE

a fire is always burning, the smoke escaping through a hole in the roof when the wind is in the right direction, and if not, remaining where it is. There are but two dozen inhabitants in all, and the oldest of them is King Bull, whose descendants represent several generations. The king is 112 years of age, and with him is a son aged 90, a grandson of 73, and a great granddaughter of 59, the last the mother of a son of 41, whose own son is 29, this latter having a daughter of 14, who herself has a daughter two years old. The patriarch of the flock is as active as any of the rest, especially in the solicitation of fees, taking whatever is offered him, from a bottle of beer to a piece of money; but he likes beer the best. Most of them are very religious, belonging to

strong, powerfully limbed, and with thick coating of hair. Sledges are driven by an Eskimo boy, armed with a heavy whip fifteen feet in length, the crack of which is heard afar in the grounds. Not a few of the inhabitants have learned to speak the English language and converse freely and intelligently about the Fair and the part which they play therein. Their winter dress is of seal-skin, and in summer a suit of pearl-gray color trimmed with fur—a tunic, pantaloons, moccasins, and a hood. Both sexes are attired alike, except that in the garb of the women is more of ornamentation and that their hoods are larger; for these also serve as baby holders, in which the little one rests on the mother's shoulders.

The village of the Laps is a miniature reproduction of a Lapland settlement, with huts of skins banked with moss, in which



ENCAMPMENT OF MICHIGAN CADETS



ZEIBEK



HINDU JUGGLER

the Lutheran faith; but some have no religion at all; among others the king, who believes in nothing greater than himself. There is a small herd of reindeer in the enclosure, and these are fed and tended with care; for the reindeer is the main support of the Laplander, its flesh serving as food, and at times as his only food; its skin as clothing and for tents; its milk as a beverage and for cheese; its sinews for ropes; its hoofs for glue, and its bones for sledges and implements of the chase. The entire village is different from the rest, and together with the Eskimo colony and several others, forms a most interesting ethnological display.

Located for the most part at the western extremity of the plaisance are a number of attractions, some more or less valuable from an ethnological standpoint and others mainly of a commercial character. One of the most remarkable is the encampment of Bedouins, already briefly mentioned. It is popularly known as the Wild East show, and consists of a typical group of Arabs with their dromedaries and steeds, the men dressed



A MAHOMMEDAN WITH WIFE AND CHILD

in native costumes and armed with scimitars and spears. They parade along the avenue, chanting in discordant notes, and otherwise advertising themselves and their exhibits. Upon the fence of their encampment are crude paintings showing Arabian life in the desert, and within the enclosure Bedouins are living in their tents, with their wives and children, as they do at home. Here, also, the horsemen indulge in various games and contests of speed and arms, as with loud shouts they race around the course or run across it, ostensibly filled with all the emotions which possess them when ranging the desert. In close proximity to the Johore bungalow, already described, is a Brazilian concert and dance hall, in which the performers are somewhat gross looking Indian women. Elsewhere are several exhibits by North American natives.





A JERUSALEM DAMSEL

In the Winnebago Indian village are not a few tasteful articles of native manufacture, and within another enclosure is said to be the original log cabin of Sitting Bull. Near by are what purport to be relics from the battle field where General Custer met his death, while purely or partially commercial in character are the Ice railway and the display of French mosaics and spun glass work. There are also such special attractions as the captive balloon, and the California ostrich farm, the latter harboring some 30 birds. In this vicinity, and at the western extremity of the plaisance are the Hungarian café and concert garden, and the grounds devoted to military encampments. The former contains a vaudeville stage, and on the roof are given the concerts which form a popular feature of the plaisance.

WORLD'S FAIR MISCELLANY.—From the opening of the Fair until its close, the amount of revenue derived from the concessions of Midway plaisance was over \$4,000,000, while the Paris Exposition received only about one-sixth as much from all such sources. Cairo street led in popularity, the admissions exceeding 2,250,000. During the same period the Ferris wheel carried 1,500,000 passengers; into Hagenbeck's arena passed more than 2,000,000 persons; about 800,000 entered the gates of the German village; nearly as many visited Old Vienna, and more than 670,000 the Javanese village. Lady Aberdeen's exhibit of Irish industries was also a most popular feature of the plaisance, attracting during the Exposition season more than 550,000 visitors.

As to the Irish Industries association, represented in Lady Aberdeen's village, the following are some of the results accomplished during the seven or eight years of its existence, as stated in substance by the management. It has brought the cottage and home industries of Ireland into communication with a common centre, drawing public attention to these industries and to the excellence of their products, thus creating for them a reliable market. Depots for their sale have been established in Dublin, London, and other business centres, with the result that in 1892 many thousands of dollars were forwarded to the homes of Irish peasantry. Designs and instruction have been furnished free of cost, and the workers trained to business-like habits. Influential men of all political and religious creeds have united for the com-

mon purpose of bettering the condition of the peasantry, some serving on the council and others tendering their support and sympathy. Among them are Gladstone, Balfour, John Morley, Justin McCarthy, John Dillon,



ORIENTAL MUSICIAN



IRISH JAUNTING CART



GEORGIA CAYVAN IN HER GLASS DRESS

Horace Plunkett, Lord Aberdeen, Lord Londonderry, Cardinal Logue, archbishop of Armagh, and William J. Walsh, protestant archbishop of Dublin.

When the Donegal Irish village was formerly opened, its promoter, Mrs Ernest Hart, who is also president of the Donegal industrial fund, was gratified by a demonstration of the good will



THE INFANTA'S DRESS

entertained for such enterprises in the United States. A representative of Archbishop Feehan, accompanied by several Fair officials, including president Higginbotham, with many friends and spectators, passed through its ancient looking archway into the semblance of the historic ground of Ireland. As with Lady Aberdeen's village, a depot was opened in Chicago for the sale of its surplus stock, a large portion of which was sold during the progress of the Fair.

The visit of Lord-mayor Shanks, of Dublin, to be further mentioned in connection with foreign exhibits was a notable occasion not only for Irish men and women, but for Fair pilgrims generally. Among the receptions accorded him, the one which occurred at Mrs Hart's village was the most enjoyable. In a speech the mayor referred gracefully and feelingly to the work accomplished, and Judge Moran, another speaker, alluded to the fact that Mrs Hart had expended more than \$60,000 or its equivalent from her private fortune in promoting Irish industries.

It is said that the project for the Ferris wheel was suggested to its artificer at a banquet given by the director of works to the architects and engineers of the Exposition more than a year before opening day. After commending the labors of the former, the director complained that the latter had fallen short of expectation, suggesting nothing novel or original for the Fair in the way of engineering science, such as was the Eiffel tower at the Paris Exposition. Taking to heart this rebuke to his profession, Ferris conceived and worked out his design for the wheel, presenting it with all the details to other engineers, by whom it was somewhat coldly received. Still he persisted, expending \$25,000 on plans and specifications before he obtained his concession. Later a joint stock company was organized, with a capital of \$600,000, of which more than \$250,000 was expended on the wheel, the Fair managers receiving one-half the profits, which were very considerable.

By the Libby Glass company, whose exhibits are described in the text, was manufactured for Georgia Cayvan, the actress, a gown of spun glass, in appearance resembling grenadine, but of a brilliant satin-like surface. It is described as being made in the fashion of 1830, the skirt fitted closely to the hips and the gores outlined with a braided gimp of glass. At the foot there is a puff of glass, and over it a fall of chiffon covered with a gleaming glass fringe. The bodice is deeply Vandyked from the belt toward the shoulder, and between the points are puffs of chiffon narrowing toward the belt and broadening toward the top, where a fall of the former is covered with the glass fringes which finish the low-cut neck. The huge puffed sleeves of the period are all of glass, draped in approved fashion and finished with fringes. The dress attracted the attention of the infanta Eulalia, who ordered a similar garment for herself.

The people of all nations made the season of the Fair one of

betrothals and marriages. Several American couples were married on the Ferris wheel while it was in motion. In the Java village Mimi, a boy of some ten years of age, was united to Samaon, a little maiden somewhat his senior, the ceremonies being conducted according to Mohammedan rites. From the house of the bride the wedding procession passed to the theatre, both bride and groom being borne in a palanquin at its head. An aged priest blessed them in Malay, and pronounced the simple words from the koran which made them man and wife, all the native spectators repeating a prayer; and then the formal ceremonies were over. Afterward the procession escorted the couple to the groom's cottage, prettily decorated with flags and bunting, where the marriage feast was spread and the couple received the congratulations of their friends. Presently the party returned to the theatre, where the natives performed the marriage dance, a serenade completing the programme. The ceremonies attending the marriage of Ahmed, the donkey boy, and Nabitia, the flower girl, both familiar figures in the street of Cairo, extended over a week, during which period neither the bride nor groom were allowed to see one another. Ahmed was formally congratulated, the marriage contract was signed in the presence of the priest, and there was singing by the bride beneath the window of the bridegroom, and *vice versa*, after which the young wife, surrounded by the female relatives of the groom, was taken to the home of her spouse. Inspired perhaps by these marital events, a member of the Kabyles, a warlike tribe of Algeria, endeavored to seize upon a dancer with whom he had become enamored since their departure from their native land. He failed, however, to carry her away, on account of the cries of her female companions and the intervention of a Columbian guard, the over zealous lover being escorted to the nearest police station to answer for his violation of American laws.

Under the management of F. D. Millet, master of ceremonies, several popular features were introduced, tending to bring together the motley collection of people whose headquarters were in the plaisance, and to demonstrate to the public what a wonderful gathering was here. On the 17th of June, an international parade, some 2,000 strong, marched along the avenue and through



A NATIVE OF PALESTINE

the main portions of the Exposition grounds, followed by bipeds and quadrupeds from all portions of the earth. First came a delegation of men, women, and reindeer from the Lapland village,



led by famed King Bull; then a squad of muscular amazons of the Dahomey settlement, with bare, scarred legs and suggestive weapons, singing a war song as they passed. Gorgeously attired in flowing robes of silk, long files of Chinamen were seen, bearing upon their shoulders a huge dragon, beating their gongs, and clashing their cymbals in competition with the huge drum of the Dahomeans. From the contingent of Algerians the shrill and excited cries of the dancing girls, who rode in rolling chairs, rose above the din of drum and clarionets. Then came a delegation from Cairo street, including camels and donkeys, Soudanese and Nubians, swordsmen, clowns, and merchants. Dancing-girls of the Persian palace posed in carriages, and there were troops of Bedouins and Turks in picturesque costume, South Sea islanders clad in seaweed, and representatives of the International beauty show, not to mention animals attached to Hagenbeck's arena, and employés of such concessions as the Eiffel tower, the Libbey glass-works, the Irish villages, and the Ostrich farm.

Paul du Chaillu, the famous African traveller, was a frequent visitor to the Fair, and instinctively gravitated toward the plaisance. He spent much time in the Dahomey village, and made warm friends with the Samoans and other members of the South Sea settlement. On one occasion the latter formally entertained and feasted him, roasting a pig on hot stones and furnishing chickens, ducks, fish, and other viands, with kara for drink.

Most of the orientals employed on the plaisance took home with them a considerable sum of money; the Turks from \$200 to \$300, the dancing girls at least \$500, and the donkey boys a larger amount. Of the last many had enough to purchase a camel or a number of donkeys on their return to Cairo, where they would probably start in business for themselves. Nearly all carried their funds in sovereigns or napoleons, exchanging therefor the silver which they received and hoarded until it amounted to a larger sum than they had ever seen before. They were experts on coin, it is said, and neither Turk nor Egyptian was ever known to accept a counterfeit piece, though some were deceived by counterfeit or confederate notes.



A CITIZEN OF BEYRUT

For the Arabian horse Aigme, exhibited in the Bedouin encampment, it is stated that \$12,000 was offered and refused on his arrival in New York. He is said to be the fastest Arab steed that was ever brought to the United States.





THE GERMAN BUILDING





## CHAPTER THE TWENTY-FIFTH

### FOREIGN EXHIBITS



T an examination held, not many years ago, at Oxford university, the question was put: "Where is the city of Chicago?" But among these British students, many of whom could read Greek and Latin at sight, and some could write in either language faultless prose and verse, there was not one who could tell the location of what was then a thriving commercial centre and is now the second city in the United States. And so it was when the project for the Columbian Exposition was published broadcast throughout Europe, even cultured men and women asking where Chicago was, while those who knew declared that such an exposition should be held in Washington, New York, Philadelphia, anywhere rather than in Chicago, which, as they said, was merely a distributing point for grain and pork. But as to this they were quickly undeceived through the representations of the commissioners, ignorance, prejudice, and indifference giving way to a wide-spread interest which in many countries ripened into enthusiasm; and not alone in Europe,

but in Canada, in Mexico, in Central and South America, in Australia, Japan, and wherever else there are commercial or other relations with the republic. Thus it was that Chicago became the seat of not only the largest but the most cosmopolitan fair that has ever been held, the total of foreign appropriations alone, apart from their exhibits, being almost as much as the entire cost of the Centennial Exposition, and more than thrice that of the London Exhibition of 1851.

Of all the European nations which have met in friendly rivalry with their cousins beyond the Atlantic, there are none that appear to better advantage than Germany, whether in the main departments of the Fair or in her national home at Jackson park. But this is as might be expected from a country in such close commercial and social intercourse with the United States, where there are at least 10,000,000 citizens of German parentage, with more than 100,000 persons migrating each year from the Fatherland. And especially in Chicago does the German element make itself felt, the number of Teutons, either immigrants or of Teutonic parentage, far exceeding the Americans in number, and forming a most desirable factor in the composition of the body politic.

Das Deutsche haus, or the German house, one of the most ornate of the foreign buildings, occupies a prominent site in the north-



SECTIONAL VIEW OF DAS DEUTSCHE HAUS

eastern portion of the grounds, fronting on the lake, from which it is separated only by a narrow strip of shore. It is three stories in height; the first of stuccoed brick, and those above of wood and plaster, with basement of rock-faced limestone. In style it is of the sixteenth century renaissance, representing the period of transition from the Gothic. The point of architectural emphasis is on the east façade, with its gabled front and Gothic spires, above which is a tower decorated at its second stage with gilded statues and surmounted by a lantern whose apex is 180 feet above ground. The main entrance is in the form of a triple archway 48 feet in length, the windows above arranged with corresponding effect. The entire front is highly colored and with profusion of decorative scheme. First there are the coats of arms of all the 26 independent states which, under the presidency of Wilhelm II, constitute the German empire. Then there are armor-clad knights with drawn swords defending the imperial crown; above them a sun, and above all, near the summit of the gable, a huge German eagle in black.

To the right extends the main body of the building, its roofs of variegated tiling and studded here and there with dormers. On the northwest corner is a large gable with handsome turrets and rich fresco work.



THE IMPERIAL CHIME OF BELLS

On the western face is an extension which terminates in a buttressed wall with domical roof and stained glass windows. Here is the chapel containing rare specimens of ecclesiastical art, presently to be described. Finally at the southwestern angle is a tall, square tower, with turreted upper stage, a reproduction of the schloss of Aschaffenburg. In the belfry is a chime of bells belonging to the imperial family, and made for a church in the Invaliden park erected by the emperor in honor of his grandmother. The plans for the German house were prepared by Johannes Radke, a government architect attached to the imperial commission, most of the materials and decorations coming in the form of contributions from German firms.

Ascending the stairway in front of the main portal, the visitor comes to a landing which is of itself a work of art, with ceiling tastefully painted and grained, tiled floors, and on the walls, frescoes of Fame and of a cup-bearer to the king. Passing through double glass doors set in arches corresponding to those at the entrance, he enters a lobby surrounded with columns and otherwise tastefully decorated. Thence through triple archways there is access to two spacious halls extending to the northern end of the building, the outer one with





FOUNTAIN AND BASIN NORTH OF THE GERMAN BUILDING



galleries on three of its sides, and both with numberless engravings on the walls. Here are the collective exhibits of German publishers, more than 300 in number, arranged in bookcases with projecting wings, each in the form of a miniature booth. There is nothing retrospective in this display, which is intended merely to illustrate the art of book-making and the appliances of the publishing trade, with cognate industries as conducted in the Fatherland. Here are shown methods and specimens of printing, stereotyping, electrotyping, wood-engraving, etching, lithography, chromolithography, and photo-mechanical processes. Bookbinding is also represented, and there are exhibits connected with the music trade. There are cases filled with cuts from illustrated magazines, and of every periodical published in Germany are shown its headlines and typographical style.

In these exhibits expression is given to one of the leading industries of the German empire; for nowhere has the publication and sale of books assumed such enormous proportions. In the empire itself are more than 6,000 establishments distributed among 1,200 cities; in Austro-Hungary there are 800; in other European countries about 900; in America at least 130, with not a few in

Asia, Africa, and Australia. Of nearly 8,000 firms in all, about 40 per cent are engaged in the publishing of books, prints, and music, including the reproduction of rare volumes and manuscripts. The remainder consist of booksellers who place their goods on the market through an elaborate system of brokerage, with Leipzig as the centre of distribution, more than 22,000 works being thus introduced in 1891. Bookbinding is also a prominent branch, especially in Berlin and Leipzig, a single house in the latter city producing 1,000,000 bindings and covers a year, varying in price from a cent to \$5,000 apiece.

In the chapel beyond is the display of ecclesiastical art, including stained-glass windows, statuary, paintings, altars, vessels, crucifixes, vestments, draperies, and ornaments, with illuminated texts on the softly tinted walls. Within recent years the revolution in church architecture has been accompanied with a transformation in art as applied to interior decorations, both breaking loose from the fetters of classicism and reverting to Gothic forms, with traces of the earlier renaissance. In the latter department the best that has thus far been achieved is fully illustrated in this sanctuary, itself a reproduction of a chapel in some mediæval German castle.

In an adjacent chamber is a display of presents belonging to members of the royal family and other personages of note. Among them are many historical documents, with copies of treaties which have changed the political geography of Europe,

all contained in show-cases of steel, with lids of thickest glass, and guarded night and day. Of Bismarck and Von Moltke there are several things to remind us; of the former a drinking cup presented by the citizens of Frankfort, with gold and silver cases in which was tendered the freedom of many cities; of the latter, his baton and various relics and decorations.

In front of the building and on the right of the main entrance are the reception chambers and offices of the imperial commissioner, Adolph Wermuth. His private room, with portal and wainscoting carved in old oak, and ornamented bookshelves surmounted by a panel hand-carved



CHAPEL IN GERMAN BUILDING



MAX RICHTER



CARVING IN WOOD





NORTHERN FRONT OF THE FRENCH BUILDING

with historic figures, is furnished in primitive style. The carpet is of antique pattern, as are the woodwork and draperies, while between two of the windows stands a hall clock some ten feet high and designed after one of the spires of Strasburg cathedral, the dial with numerals painted on triangular pieces of ivory. There is a porcelain fireplace, colored in blue, and above the grate a tile painting of a wedding party of the olden time. The ceiling is elaborately decorated, and in the centre is depicted a sunrise scene, a contribution from a member of the Royal academy of Berlin. In a southern projection of the building, disconnected from the rest, is the exhibit of the Waldhof cellulose manufactory at Mannheim, its products consisting of the pulp of pine wood and used for the making of paper.

Germany's day, the 15th of June, the fifth anniversary of the accession of Wilhelm II, was one of the events of the Fair, the attendance far exceeding all previous records, with more than 200,000 persons admitted into the grounds, of whom at least 50,000 were Germans. The exercises were held in front of the Deutsche



EASTERN FAÇADE OF THE FRENCH BUILDING

haus, beginning with music and singing, after which Harry Rubens, in the name of the German-Americans, delivered an address of welcome to the imperial representatives. After "Die Wacht am Rhein" rendered by the maennerchor chorus, Baron von Hollenben, the German minister, responded on behalf of the government, and then the oration of the day was delivered by Carl Schurtz, whose speech was of a patriotic character, touching on the loyalty of those who, while leal to the country of their adoption, still held in honor the Fatherland. He was proud of the German display in all departments of the Exposition; for here was embodied the spirit of the nation, expressing in every branch of industry and art the highest results of which that nation was capable. Commissioner Wermuth, who followed, spoke of the commerce of Germany, as contrasted with that of the United States, predicting that the dawn of the coming century would witness a revolution in the commercial conditions of the world. The closing address was by Carter H. Harrison who appeared, as he said, somewhat at a disadvantage, having to speak against a brass band and a thunderstorm. A parade, in several divisions, with floats, tally-ho coaches, and more than 16,000 people in line was a feature of the day. Late in the afternoon there was a concert at Festival hall, and at night a pyrotechnic exhibition, in which the figures of Germania and Columbia stood side by side in tracery of fire.

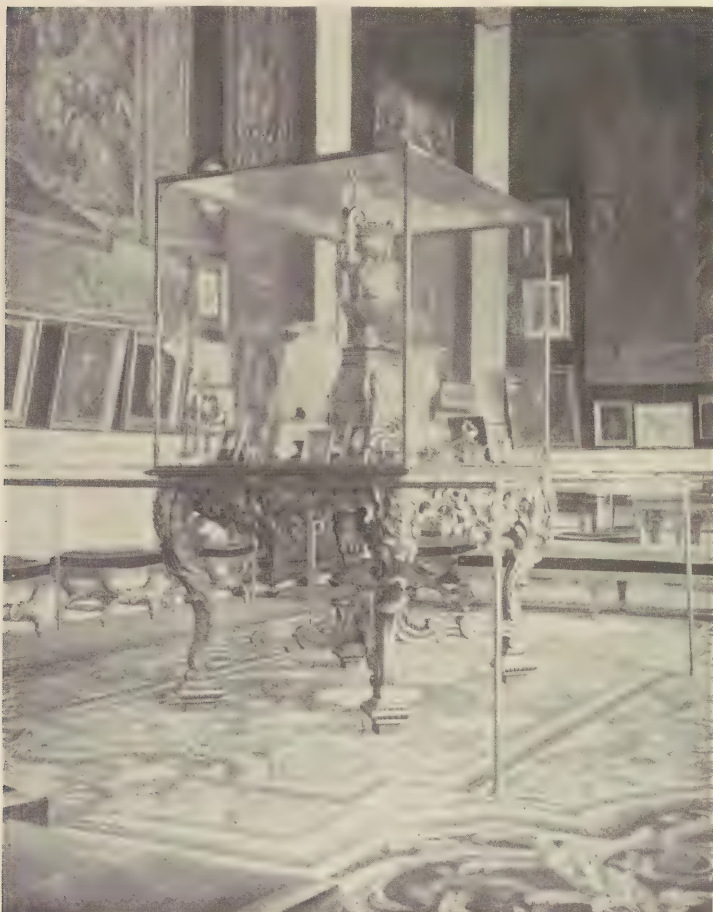


The French pavilion occupies one of the choicest sites in Jackson park, east of the Art palace and close to the shore of the lake. It is of the classic order, and consists of two structures connected by a colonnade, with a garden between. Under the portico of the north front are views of Paris, and especially of its government buildings, with replicas of famous statuary in the vestibules and balconies. The interior plan differs from that of other foreign structures, most of the space being devoted to exhibition purposes, and with the quarters of the commission held in subordination to the rest.

From the vestibule the visitor passes into a chamber resembling the salon of the palace of Versailles, where, on the 6th of February, 1778, was concluded the treaty between France and the United States, this being the first recognition of the latter by a European power. Years afterward were placed in this salon all the articles presented on behalf of the republic to the Marquis de Lafayette, and these are arranged in its reproduction precisely as in the original, thus forming a graceful tribute to the nation whose cause the marquis made his own. Among them is the sword presented by congress when, in 1779, he returned to his native land to solicit aid for the struggling republic. The handle, mountings, and scabbard are of appropriate design and most elaborate workmanship; the blade, hidden during the reign of terror in the garden of Chavagniac, and there corroded with rust, being replaced with one presented by the people of Paris and forged from metal taken from the ruins of the Bastille. In this collection are several of Washington's letters, and rings containing locks of his own and Martha Washington's hair, one of them presented to Lafayette during a farewell visit to the tomb of his former comrade-in-arms. Other features are the busts of Washington and Franklin, portraits of historic characters, and the decoration of the order of Cincinnatus, also termed the "decoration of the soldier-laborer," presented by the former to Lafayette, and established in 1783 for distribution among French and American officers who had served in the war of independence.



EDMUND BRUWAERT



LA FAYETTE CHAMBER

Across the garden is the exhibit of the city of Paris, illustrating in its entirety the municipal system of the metropolis. First is the police department, where is shown the Bertillon method of identifying criminals by means of photographs. In a large case is a complete rogues' gallery, and something more than this; for here is displayed every type of forehead, eye, nose, ear, and lip, with profile, full face, and head, all grouped for anthropological comparison. Near by is the school exhibit, with specimens of work, including those from the Prevost orphanage, and from a printing and bookbinding school where pupils are admitted at the age of twelve to serve a four years' apprenticeship. Here also are models of street cleaning machinery, while the fire department is represented in photographs, and in map form are shown the sewerage and water systems, with a section of a house supplied with sanitary apparatus. In one of the rooms is a collection of bric-a-brac from Parisian merchants, with works of decorative art and the finest of Gobelin tapestry. Of the passage-way connecting the two buildings one of the sides is open and with a series of columns rising to the roof. On the other side are depicted scenes in and around Paris with which all the world is familiar. While these are not elaborate works of art, some of them are from prominent artists, Vauthier, for instance, having a sketch of the Bois de Boulogne, and Didier of the Avenue des Champs Elysées and the Place de la Bastille.

It was to commemorate the fall of the Bastille that the 14th of July was selected for the French celebration, this being the 104th anniversary. First of all there was a luncheon or breakfast so-called, given by the consul-general to the French commissioners,

exhibitors, and other invited guests. In the afternoon a reception was held on the lawn, the consul standing near the bust of President Carnot and the statue of "Gloria Victis," a replica of Mercié's group now standing in the Hotel de Ville, showing a winged figure of Victory bearing in her arms a wounded soldier with broken sword in hand. Then, by Commandant Ballincourt, M. Bourbier of the French marines was presented with the cross of the legion of honor in recognition of long and faithful service, the first man thus to be decorated on American soil. There was music by the Iowa band, and from a buffet adorned with morning glories refreshments were served by comely French damsels in Phrygian caps with tri-colored cockades. Toward dusk the assemblage dispersed after a pleasant and informal reunion, one in which there was no speech-making to mar its enjoyment.



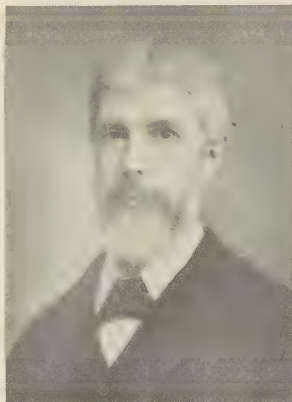
G. R. R. COCKBURN, CANADIAN COMMISSIONER



ARTHUR RENWICK, COMMISSIONER NEW SOUTH WALES

In the quantity, if not in the quality of exhibits, Great Britain and her dependencies rank first among foreign participants, occupying a total area of 500,000 square feet, or nearly half the entire floor space of the great exhibition of 1851, the first international exposition worthy of the name. When in March, 1891, Robert Lincoln, as American minister, invited on behalf of his government the coöperation of the United Kingdom, the proposition was somewhat coldly received; for the passage of the McKinley bill still rankled in the hearts of British merchants and manufacturers. A royal commission was appointed and the task of organization accepted by the society of Arts, which had been closely connected with similar enterprises whether at home or abroad. But the entire amount appropriated was only \$125,000, and with this mensurate with the occasion; for other British colonies had appropriated from

Gradually, however, the authorities of the coming exposition and the magnified-determined to bring the matter promissive circulars were addressed to promissive who had taken part in former exhibitions, ing newspapers, English, Scotch, and Irish. and this was even manifested in the increased to \$300,000 by an almost unanimity of the Fair Great Britain was engaged and especially in the Fine Arts, the gallery with those of many of the wealthiest cities the disposal of the Art committee. It building, to serve as the quarters of the architectural features of the Fair.



SIR HENRY TRUEMAN WOOD, SECRETARY OF THE BRITISH COMMISSION

began to realize the all-embracing scope of its general design. It was then presented before the public; and for this purpose firms and personages, including all advertisements being inserted in the lead. Thus a widespread interest was aroused, house of Commons where the grant was unanimous vote. Hence in several departments to present a fairly creditable display, series of the queen and the royal family, zealous and corporations, being placed at was also determined to erect a separate commission and as a contribution to the



JOSEPH TASSE, CANADIAN COMMISSIONER

Victoria house, as is styled the British home in Jackson park, is a unique and substantial structure, forming three sides of a quadrangle, its open side inclosed by a raised and balustraded terrace, which almost touches the waters of the lake. Designed by Colonel Edis, architect of the commission, it is in the style of the Tudor, and especially the Elizabethan period, its upper story of half-timber construction, with projecting gables, of which many well-preserved specimens may still be seen in England. But there is also a modern aspect to the building; for on the lower story terra-cotta is freely used, with brick facings and mullioned windows. Perhaps the most interesting feature is the decorative scheme and furnishings of the interior, for which nearly all the materials were contributed as loans or gifts, especially by the London firm of Johnstone Norman and company, to which, as to other establishments, the commission acknowledges its obligations.

Passing through a covered portico, the visitor enters a spacious hall, on one side of which are the library and reception room, and on the other the offices. The hall is oak-panelled, with furniture of carved oak in partial imitation of that which belonged to the Medici family, and ceiling copied from the North Wales mansion of Plas Mawr, erected about the year 1550, and better known as Queen Elizabeth's palace. On a cassone or ornamental coffer of Florentine pattern, as in the royal palace of Naples, is a panel on gilt ground, painted with figures allegorical of Columbus'



J. J. GRINLINTON, SPECIAL COMMISSIONER FOR CEYLON





VICTORIA HOUSE

departure from Spain. At its side is a large arm-chair on which is sculptured in bas-relief "The Discovery of America," with a companion fauteuil in the style of Francois I., known as the cacquetteuse or gossip chair. There are wide old-fashioned fireplaces with huge andirons, and on either side of the grates a lion and unicorn rampant. In the alcoves over the stairway, which is ceiled as in Haddon hall, the seat of the duke of Rutland, are armored knights on pedestals, and here also is what may be termed a "grandfathers' clock," such as those

which stood in the homes of "Merrie England."

The library is finished and equipped entirely in oak, with ceiling ribbed in geometric forms, to which book-cases extend from the floor. As to the furniture, each piece was designed from the antique, so far at least as it could be adapted to modern requirements. So with the reception room, in whose carved and inlaid furniture are largely represented the manors of mediæval times, with patterns borrowed from the Louvre and the South Kensington museum; but all with a certain affinity which gives to the collection a just adaptation of parts. A cabinet of ebony and boxwood resembles one made for Archbishop Sharpe in 1621. A Scotch clothes-press belongs to the time of James I, and in a walnut cabinet with capriole legs is



THE CANADIAN HEADQUARTERS

reproduced a Dutch design of the days of William and Mary. The centre table is a fac-simile of that which stands in the dining-room of Windsor castle, and another table resembles the one fashioned for Sir Thomas Holte of Aston hall, a loyal subject of the Stuarts. There is a King Charles chair of ebony, with a Knole chair such as stood in the Kentish residence of the earls of Dorset, and one from Linlithgow palace, belonging to the time of Mary, queen of Scots. In the ingle-nook is a terra cotta fireplace, on the back of which are cast the arms of Great Britain. In a painting by Sargent is depicted the "Jubilee Garden Party at Buckingham Palace," wherein are 400 figures. The ceiling is copied from the banquet-chamber at Crewe hall, one of the finest specimens of Elizabethan architecture.

The waiting-room is ceiled as in Campden house, the residence of the duke of Argyll, and with simpler treatment as to furnishings, except for the antique vases and the embossed leather on the walls, the latter identical in pattern with that which is seen in the ball-room of Sandringham hall, the county seat of the prince of Wales. On the floors of all the rooms are Wilton rugs woven in oriental designs, while the draperies and fabrics are the most finished products of the looms of England and France. On the upper story is the boardroom of the commissioners, furnished in old oak, with seats and lounges such as are used in the Carlton and Reform clubs. Especially handsome is the office of the commissioner, Sir Henry Wood, with low, broad windows overlooking the lake, and tastefully decorated walls hung with the choicest works of art. The veranda is lit by old-fashioned English lamps, the building itself being lighted by electricity, the globes concealed by the strap-work of Elizabethan chandeliers.

The house was opened to the public on the queen's birthday, the 24th of May, but without exercises, except that in the Canadian building there was brief informal speech-making, with singing of the national anthem, followed at night by a banquet given at a Chicago hotel under the auspices of the commissioners. British Empire day fell on the 19th of August, the attendance exceeding 213,000, the largest up to that date except for the 4th of July.

At the appointed hour, escorted by the West Point cadets, the detachments selected for the military tournament from the choicest regiments of the British



W. D. DIMOCK



army, among them "the far-famed Black Watch," formed in line in front of Victoria house. Then came "the trooping of the colors," after which soldiery and civilians adjourned to Festival hall, where, as resident consul and chairman of ceremonies, Colonel Hayes-Sadler delivered the opening address, briefly and with becoming dignity. After "God Save the Queen," rendered by the Columbian chorus, he proposed the name of the president of the United States, the cheers being given with a will, and the mayor of Chicago responding on behalf of his countrymen. As secretary of the royal commission, Sir Henry Trueman Wood discoursed with telling effect on the status and future of the dominion. Other speeches were from the commissioners for Canada, India, Ceylon, Trinidad, and British Guiana, all of which were represented at the Fair. Later there was a concert in the court of honor, followed by the last performance of the tournament, the members of which set forth on the morrow for Toronto. At night there was the usual display of fireworks, and meanwhile a civic and military parade was held in the city, massing on the lake front and after a circuitous route disbanding on Michigan avenue.

Scotchmen held festivity for an entire week during the term of the Fair, the 4th of August being devoted to exercises in the reception room of the New York building and later in Festival hall, under the auspices of the Scottish directory.

These were brief and of informal character, the Scottish choral union being present at the second meeting, where national airs were played on bagpipes, with dancing of the Highland fling. The Welsh and Irish had also their special days, the former on the 8th and the latter on the 30th of September. In a pouring rain the Irish parade assembled on the Midway plaisance, only 2,000 strong, instead of the 30,000 that had been expected. Nevertheless it was an imposing procession, with bands galore and several military companies, conspicuous among which were the old Hibernian rifles. There were the Foresters, the ancient order of Hibernians, the Gaelic athletic associations,



NEW SOUTH WALES

temperance and church societies, civic and literary organizations, with invited guests in carriages and tally-ho coaches. Everything and everybody was arrayed in green; the women with green dresses and hats, the men with green cravats and badges, and the horses with green plumes; while over the Electricity building floated the green flag of Erin, and even the lake assumed for the occasion a deeper hue of emerald.

The exercises were held in Festival hall, where Archbishop Feehan, as chairman of the day, delivered the opening speech. After an eloquent tribute to the artificers of the Fair, in honor of which they were met together, he continued in part as follows: "But the Irish-American people assemble for another motive, and that is to revive for to-day, and I hope for the future, the traditions as well as the aspirations of one of the oldest races of the world. You represent a most ancient people; for your forefathers came from Phoenicia 3,000 years ago, and founded a nation at the time when Moses was leading the Israelites from Egypt, and when Cadmus was giving letters to the world. Even at that early period the Irish were a people with a written law and of advanced civilization. And to-day, toward the close of the nineteenth century, the Irish-American people recall those grand progenitors and keep alive their traditions." Then spoke Archbishop Hennessy of Dubuque, followed by Edward Blake, who as a representative of the Irish party in the Commons, chose for his theme "Home Rule," and in conclusion read a letter from Gladstone, in which were the following words: "I learn with great pleasure that there is to be an Irish day during the World's Fair. There could not be a more interesting, nor except on the day of the final victory, a more encouraging occasion." Among other speakers

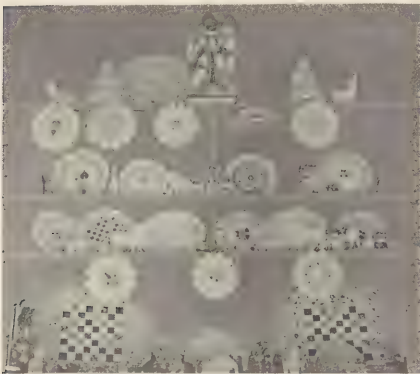


EAST INDIA TEMPLE

were Arthur O'Connor, James Shanks, lord-mayor of Dublin, and Father Ring, who read a dispatch from the primate of Ireland. There was music, with singing of national airs and ballads, a feature in which was the rendition in harp solo of ancient Gaelic melodies by a daughter of A. M. Sullivan, the Irish orator. Later a reception at Blarney castle concluded the celebration.

On the plaza in front of Victoria house, and almost opposite the Canadian building, is a group of statuary in terra-cotta, a replica of the American pier piece on the pedestal of the Albert memorial column at Kensington, erected by order of the queen in honor of the prince-consort and of the great exhibition of 1851. The figures are of heroic size, with America in the centre in the form of a shapely Indian maiden mounted on a buffalo, in Indian costume and with figured head-dress; in her right hand a stone-headed lance, and in her left a shield emblazoned with national emblems. The United States is represented by an eagle with outstretched wings; Canada by a beaver and

by a young girl robed in furs; Brazil by the Southern Cross; Mexico by a male figure, and South America by a half-breed Indian with bronco and sombrero. It is in the main an excellent piece of workmanship, though somewhat heavy in tone and bulk, weighing 25 tons and costing \$25,000. By Henry Doulton, proprietor of the Doulton pottery works at Lambeth, where it was fashioned, the group was presented to the city of Chicago, "as a connecting link between the first international exposition and the last and crowning one."

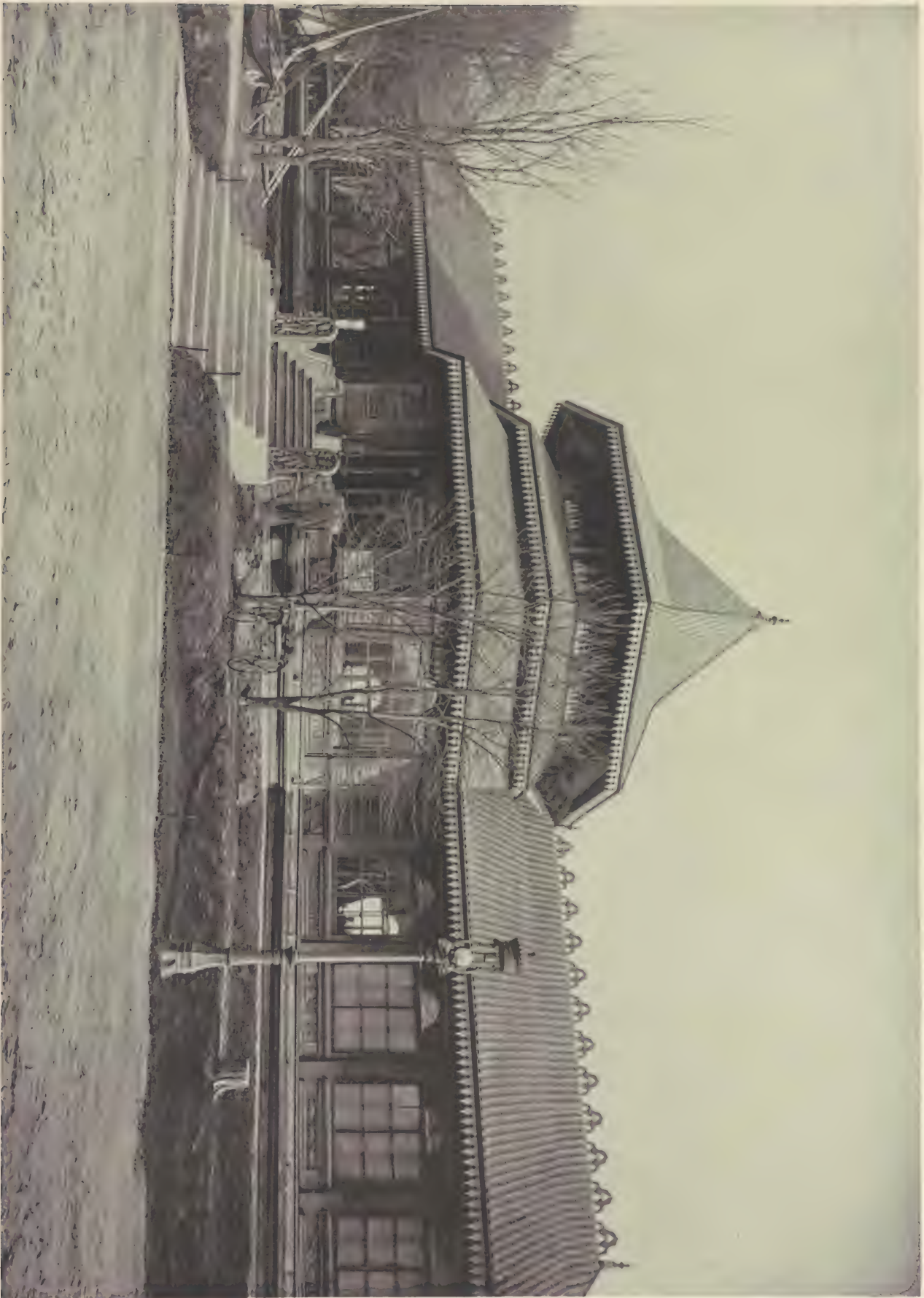


CARVINGS AND MOSAIC WORK, INDIA BUILDING



CARVINGS, INDIA BUILDING





CEYLONESE PAVILION

Canada is well represented, as we have seen, in the main divisions of the Fair, much more so indeed in some departments than the mother country, in relation to industrial conditions. That the dominion would appear to good advantage in her agricultural and horticultural, her fisheries and mining exhibits, was expected of this enterprising and ambitious commonwealth; but in other branches also her exhibits were of excellent



EXHIBIT OF SWEDISH IRON WORK

quality. In the annex of the Transportation building, for instance, the vestibuled train of the Canadian Pacific was a feature of the display, while in the building itself was a choice assortment of carriages, buggies, wagons, boats, and railroad and other supplies. In the palace of Mechanic Arts her collections were somewhat of a surprise; but perhaps the greatest surprise was in the hall of Manufactures and Liberal Arts. While here was no large array of costly luxuries, there was a comprehensive and varied assortment of staple lines and standard grades, the groups of textile fabrics and especially of cotton goods attracting general attention. So with the educational groups; Ontario, Quebec, and other provinces fully illustrating their thorough and practical systems of instruction, from the kindergarten to the college and university.

The Canadian pavilion, the plans for which were designed by the department of public works at Ottawa, is in the form of a quadrangle, surrounded with wide verandas supported by Tuscan columns, with semi-circular projection on the front and surmounted by a tower with look-out, the view from which is one of the finest in Jackson park. There is little in the way of exhibits, except for the structure itself, its apartments finished in polished native woods representing the various provinces. Passing through the main portal, the visitor finds in the entrance hall a post-office, telephone office, and intelligence office, where registers afford information as to hotel and other accommodation, together with the whereabouts of friends. In the reception room adjoining, its walls and pillars festooned with flags, are files of Canadian newspapers from every portion of the dominion, and near at hand are the quarters of the national commission, of which J. S. Larke is chief executive officer, while across the corridor are those of the commissioners for the provinces.

At the top of a spacious stairway, also constructed of native woods, is a corridor adorned with photographic views of Canadian scenery and mounted specimens of Canadian birds. At either end are exits to the balconies which encircle the pavilion, and on the right of the staircase, two other offices for the national commissioners, Senator Tasse and G. R. R. Cockburn. Across the corridor is a dining-room, where many have been entertained with the hospitality characteristic of the dominion. Adjoining is a ladies' parlor, and elsewhere are the apartments of C. F. Law and Senator Perley, commissioners for British Columbia and the Northwest territories, with that of W. D. Dimock, secretary of the Canadian commission, who for many years has been engaged in similar service in connection with international and local exhibitions. Finally there is the sanctum of the press, and on the floor above are the tower and smoking rooms far above ground. No plaster is used in any part of the interior, the walls and ceilings all being finished in native woods handsomely polished, as I have said, and showing the native grain—oak, pine, chestnut, walnut, cherry, maple, birch, ash, spruce, cedar, and butternut.

Over a bold dental cornice is an open balustrade, and the roof is low pitched and partially concealed by a paraquet wall. Around the pavilion is a plat of ground, green turfed, dotted with Canadian shrubbery, and divided by serpentine walks and roadways.

The 1st of July, the 26th anniversary of the confederation, was selected as Dominion day, a day held in no less honor by its citizens than is the 4th of July by those of the United States. The celebration began with an informal reception at the pavilion, followed by a military and civic parade and by exercises at Festival hall.



SWEDISH GLASS-WARE





SWEDISH BUILDING

Among the audience were not only thousands of Canadians and former subjects of the queen, but there were also many thousands of Americans; so that in his opening address Commissioner Cockburn observed: "If ever I harbored a doubt that Americans were not true friends to Canada, this assemblage would forever put such a feeling at rest." Senator Tasse of Quebec spoke in French, the applause which accentuated his remarks showing that the French-Canadians were here in force. The mayor delivered a brief dissertation, pronouncing the Canadians "a very nice class of people, whose interests were parallel with those of the union, and whose government lay in parallel lines," predicting also that the time was not far distant when "one flag would float over the country from the far south to the farthest north." To this Commissioner Larke responded by reminding the mayor that parallel lines never meet. But all was said in amicable mood; for between the dominion and the union, as between the union and the united kingdom, the breach, if such there be, is more in fancy than in fact.

Adjacent to the Canadian pavilion is Australia house, or as it should rather be termed, the home of New South Wales; for in the structure and nearly all that it contains is represented only this, the oldest of the



PARLOR, SWEDISH BUILDING

Australias. While serving among other purposes as the headquarters of the commissioners, it is also an exhibition building, especially as to the fine arts, from which department, as we have seen, the colony was almost excluded, not for lack of merit but through misapprehension. Of sculpture there are several pieces, two of them portrait busts in plaster and others carved in native marble and freestone. Of oil paintings there is a large collection, executed by members of the Art society in Sydney. They embrace a great variety of subjects, from portraits of premiers and primates to the hunting of wild ducks; and it is worthy of note that, with rare exceptions, they deal with local themes and personages. Landscapes, with sketches and genre paintings of Australian life are the favorite subjects, some of them finished canvases and nearly all above amateur rank. In water colors there are more than 100 works from the same society, most of them by Mrs Ellis Rowan of Victoria, representing the flora of Australia, all studies from nature, and combining with richness and delicacy of coloring, boldness of execution and skill in technique.

The building itself is at least on a par with others of its class, 60 feet square, with a spacious portico in front, the roof of which is supported by Doric columns, with pilasters of the same order at each of the corners. The frieze and balustrade extend around the entire edifice; above all the openings are moulded



architraves, and beneath each window, moulded modillions. In the interior is a central nave 30 feet wide, from which rises a polygonal dome, giving accentuation to the architectural scheme.

In the India building the ancient glories of Agra, with its changing fortunes, are fully typified, and here are models in marble and alabaster of many monuments which testify to the former power of Moslem and Hindoo. Even the famous mausoleum is shown in miniature, the original bearing a dome of marble 70 feet in diameter. The structure itself is an harmonious combination of Arabic and Indian architecture, minarets springing from above the main entrance and corners, the former painted in oriental style. While the exhibits are unique and comprehensive, perhaps the most interesting feature is a party of Hindoos of high caste who have come to America partly on a proselyting and partly on a business mission.

Great Britain is of course represented in the industrial and historic collections of the India building, and

especially the India tea association and the Bengal chamber of commerce. Near the principal entrance is a tea room, where the beverage as made in India is served by native attendants in picturesque attire, and presented in porcelain hand-painted by native artists. Small tables are placed in shady corners of the hall, where the visitor may enjoy the variegated picture presented by the art manufactures of the empire, scattered profusely around him and in the galleries above. In the centre of the main floor is a marble shrine, elaborately carved and colored, standing about the height of a tall man. On thousands of such shrines in India are images of the Hindoo trinity—Brahma, the creator; Vishnu, the preserver; and Siva, the destroyer; but here are no sacred effigies, except that on either side is a figure of Buddha, screened by the hood of the sacred cobra from the scorching rays of the sun, while the eastern savior of mankind is absorbed in worship or contemplation. Carved in stone or wood, hammered from brass, painted and embroidered on silk or satin, are also such minor divinities as Agni, the god of fire, who burns the body that he may recreate it in celestial form; Doorga, wife of Siva, with three eyes and ten arms; Sudra, the king of heaven, and Tama, the judge of the dead; Krishna, one of Vishnu's many incarnations, and the elephantine Ganesha, symbol of prudence.

A superb display of art manufactures

is made by Telléry and company, whose headquarters are at Delhi, with branches in Calcutta, Bombay, and Simla. Every article is fashioned by hand, and the entire exhibit is intended to illustrate the efforts of business men to check the importation of goods which threatens to overwhelm the native industries of the country. Since rich and poor alike utilize their savings in the making of silver articles, either for personal adornment or practical use, the trade in silverware has assumed a leading position, centring at Kashmir, Lucknow, Kutch, Madras, Poona, Kuttack, and Burmah. While these articles are all in repoussé work, handsomely wrought, they have also their characteristics, according to the locality in which they are made. The influence of Mohammedanism is shown in the Kashmir wares, whose ornamentations are exclusively floral in character, the designs being chiefly taken from shawl patterns. Raised mythological figures, relieved by floral decorations, give to the articles collected from Madras and Poona their pleasing effect. But the Burmese repoussé work on silver is considered the most artistic, the exhibits from all these points comprising tea and coffee sets, wine jugs, sugar bowls, candlesticks, bread baskets, photograph frames, cream and milk jugs, salt cellars, pepper casters, card and cigarette cases, toilet sets, and boxes of many descriptions. There is also an attractive display of articles wrought in brass and copper, chiselled, embossed, engraved, enamelled, and incrustated in a variety of designs and with a richness of



EXHIBITION HALL, SWEDEN



ARTUR LEFFLER



effect which is the best possible proof of the skill and patience of artisan and designer.

Piled upon counters and tables on the ground floor and in the galleries are rich silks, many of them woven from Chinese material; brocades worn by Hindoo ladies; Kashmir shawls and silk embroideries; silver tinsels from the hand looms of Delhi and Agra; gold leaf cotton prints, studded with glass, from Poona; cloths covered with designs in wax and sprinkled with mica; woolen and cotton carpets and rugs, with goods of silk and cotton printed and embroidered.

Carvings in black, sandal, and teak woods are exhibited as specimens of an industry which has flourished in India for many centuries. In ancient times carvers in wood ornamented the thrones of kings and princes, the chariots of warriors, and the shrines of temples. These were the days when the façades, doors, windows, balconies, partition screens, and furniture in the dwellings of the rich were elaborately decorated, the custom gradually spreading to the west. The most intricate work in sandal wood comes from the Madras and Bombay presidencies, Mysore and Burmah, the Burmese carvings being especially bold and fantastic. The Punjab and the northwest provinces supply the best inlaid specimens, their most noticeable characteristic being the combination of brass wire with dark colored woods. Beautiful lacquer work, ivory carvings, water color paintings on ivory, most of them miniatures of the Mogul emperors, enamels on gold and silver, idols and sacred animals in marble, such as are seen in the temples, and the delicate pottery which the high caste Hindoo will never use but once, are presented in many forms and symphonies of coloring.

Finally there are relics and curios, some of historic character. One of the most remarkable is a collection of swords, battle-axes, matchlocks, powder-horns, spears, bows, arrows, and shields, representing the weapons of the Hindoos and Mohammedans, the Burmese and the warlike Mahrattas. There are the finest of Damascus blades, the steel of which is said to have come from India, the entire group being suggestive of the wars and conquests of ancient and modern times. Old manuscripts and pictures, antique musical instruments, bronze vessels and idols from Thibet and Nepaul, Indian, Indo-Scythian and Græco-Bactrian coins, and a quantity of chinaware sent long ago by the emperors of the celestial kingdom as tribute to the Mogul emperors, are among the curiosities here displayed.

There are also living curiosities in the East India building, among them one Gobind Burshad, a Brahmin high-priest, and the first one, as he claims, to visit the United States. Gobind is a man of striking appearance, with jet black hair slightly tinged with grey and features thoughtful and intent. He is a scholarly man withal, speaking English, Mogul, and Persian fluently, in addition to Hindostanee. What pleases him best is to discuss theosophy and to show his knowledge of the ancient traditions of his native land, especially as to its gods, of which there are many in this temple—gods of brass and bronze, of ivory and wood, of silver, gold, and precious stones. Of all the antique specimens he knows the history, and taking up, for instance, an ivory statuette will declare that it came from a Buddhist temple where, 1,000 years ago, it was worshipped as the god of war.

Of the courts which represent the British colony of Ceylon, two are in the departments of Agriculture and Manufactures, one in the Woman's building, and the fourth remains to be described. Except of course in the Manufactures division, all are mainly intended to place before the public the tea industries of the country as developed within recent years, exports of tea increasing from 23 pounds in 1873 to 162,000 pounds in 1880, and 72,000,000 in 1892. Since the coffee plantations were almost destroyed by the ravages of a fungoid pest, the cultivation of tea has become the staple industry of Ceylon, and



NORWAY'S BUILDING



CHR. RAVN, NORWEGIAN COMMISSIONER



for its products are claimed special dietetic properties, with superior richness of flavor and absolute purity and cleanliness. By the Planters' association of the chamber of commerce funds were promptly subscribed, and a local committee, acting in accord with the royal commission in London, undertook the task of organizing the exhibits, J. J. Grinlinton, as special commissioner, proceeding to Chicago to secure the necessary space.

The Ceylon court, which serves at once as government building, exhibition hall, and tea kiosk, consists of a central octagon, with wings facing north and south, raised on a projecting basement and approached by stairways carved in designs from ruined fanes, some of them erected several centuries before the Christian era. In its columnar design the structure is mainly of the Dravidian order of architecture, adopted with modifications in the ancient temples of the Cingalese. Native woods only are used as materials, some 20,000 feet of timber being cut and shaped for the purpose. The framework of the exterior is of satinwood and the projecting roofs terminate at the eaves line in ornamental valance tiling, the roofs themselves being covered with imitation pan-

tiles, rising at the centre in tiers and culminating in a spire, with finial as in the temple of the Sacred Tooth of Buddha.

In the octagonal hall, entered through a handsomely carved doorway, the ceiling is supported by pillars on which are designs of the lotus and plantain, fashioned as in the royal temple and the king's granary at Kandy. A score of native woods are used in these pillars; among them ebony, tamarind, satin, and ironwood, their names, whether botanical or in plain English or Cingalee, being indicated on labels. On opposite sides of the hall are colossal figures of Buddha and Vishnu, with others, disposed at intervals, of a Buddhist priest and his bowl for receiving



THE TURKISH BUILDING

alms, of a Kandyan chief, and a Veddah and his wife, very few of the aboriginal Veddahs now remaining alive. The panels are painted by native artists, the most interesting being those which represent the religious processions, with figures of tom-tom beaters, standard bearers, pikemen, elephants, and devil-dancers.

The exhibits, contained in cases of ebony, and satinwood, are grouped around the octagon and wings, consisting, apart from tea and coffee, of native manufactures, works of art, and curios; among them jewelry and the quaintest of carvings in ivory, ebony and cocoanut shells. Of tea there are fifty varieties from twice as many plantations, and in the tea kiosk above the central hall, the beverage is served as in Kandy or Colombo.

In this apartment are paintings of modern design, its decorations resembling those of the chamber below, but of less elaborate pattern. Recesses are formed by a double row of pillars hung with oriental draperies; and here are tea-poys, or ornamental tables, made of satin and margosa woods.

On a triangular site opposite the Fisheries building is a picturesque structure of many colors, towers appearing upon different portions. with a tall spire rising from the centre, the entire edifice being a combination of church and castle architecture. The main hall, hexagonal in shape, is 60 feet across; above it is a cupola, and above this a steeple with flagstaff, from which is displayed the Swedish ensign, some 150 feet above ground. The building was forwarded in sections from Sweden, and so constructed as to represent the style prevailing in churches and country homes in the time of Columbus. Worked

PRUDENCIA DE MURGUIONDO,  
URUGUAY

IBRAHIM HAKKY BEY



FISHERIES AND FOREIGN BUILDINGS



artistically into the base of the main façade are specimens of the brick, terra cotta, and cement work produced by the most prominent manufactories in Sweden. Here also, as in the staircase, are tiles of polished cement; but with these exceptions the entire structure is of wood.

The exhibits include one of the most complete collections of Swedish iron, both in the ore and manu-

factured forms, that has ever been seen in America. The most scientific display, designed to illustrate the metallurgy of iron and steel, is made by the association of Swedish iron masters, the object of which is to promote this industry in every possible way. It advances money to its members to assist them in extending their works, making appropriations also for the purpose of conducting experiments and investigating new processes. Several iron and steel works show iron ores from various mines, such manufactures as ingots and billets of Martin and Bessemer steel, subjected to tests for strength, ductility, and other desirable qualities. Drawn wire and wire-rope, cast steel goods and materials of war, rolled pipes, iron in bars and sheets, hammers and tools for working stone, anchors, anvils, parts of steam



TURKISH EXHIBITS

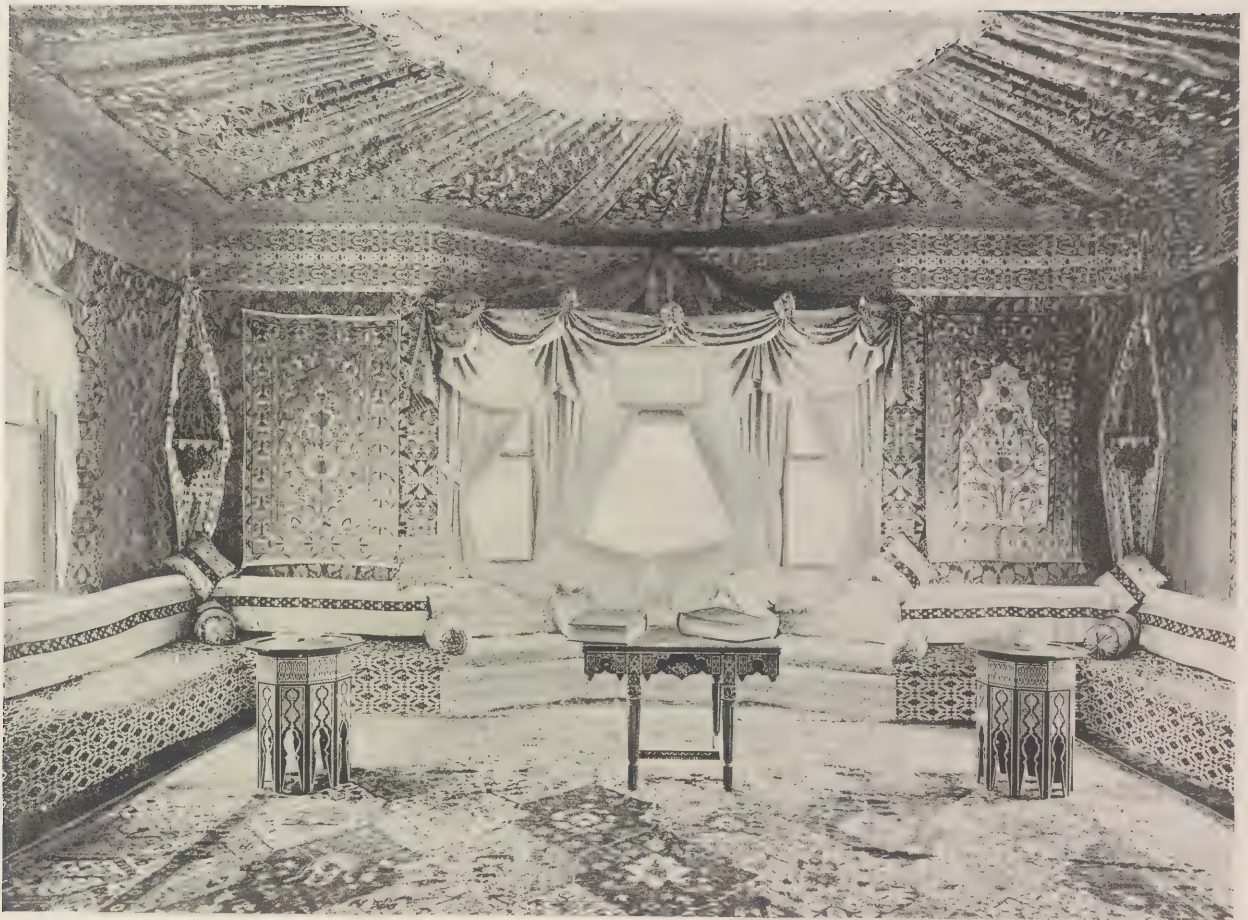
minerals, and wood, are also displayed, together with engine and car wheels engines, and other mechanisms.

By the geological department of the government are exhibited glass models and maps of the Gladhammer, Ljusnarsberg, and other mines. There are also earthenware and glass products, gold and silver work, fire and facing bricks, tiles and ornaments for mural decorations, yellow, brown-glazed, and gray-burned; unglazed vessels, pedestals, and garden decorations, as well as glazed earthenware pipes and tubes, pottery for household and chemical uses, and earthenware stoves, table sets, and toilet ware. In the line of glassware are many articles for the table, cut, plain, etched, and gilded, and various exhibition cups for art museums, for which awards were received at expositions held in Paris, Moscow, Copenhagen, Bogota, Philadelphia, and several cities in Sweden. Among objects representing art metal work may be mentioned a buckler of chased steel-plate, with border ornaments in old Scandinavian style, gilt and deeply etched. A viking ship in full sail is seen in the centre, around it a score of scenes founded upon the Saga. Lamps of chased brass and vases of steel attract much attention, with fans and jewel cases of the latter metal, variously etched and gilded. There are also sets of silver church plate, a toilet service of silver gilt formerly belonging to Queen Sophia Magdalena, the reproduction of a cup presented in 1631 to Gustavus Adolphus by the citizens of Nuremberg, and collections of antique drinking cups and jewelry associated with the history of the country. Mention should also be made of the exhibits of wood pulp, wrapping and printing paper, and other factory products for which Sweden is famous.



OFFICE, TURKISH BUILDING





OFFICE OF TURKISH COMMISSION

Elsewhere are imitations of Venetian lace, knitted shawls and coverlets, embroidered underwear, a collection of fans from the Baroness Norderfalk, and an exhibit of hangings, tapestries, and carpets from the Friends of handiwork, a Stockholm association founded a score of years ago for the encouragement of art industry among Swedish women. Private exhibitors also show embroideries in the style of the Lapps, portières, carvings in wood, antique furniture covered with Gobelin and gilt leather, and silk embroideries and screens. Another attraction in the government pavilion is a representation of a Swedish home, in a suite of rooms completely furnished and decorated according to native customs by the Industrial Art society, which in coöperation with agricultural organizations has done much for the improvement of domestic industries. Various manufacturers and house furnishers, as well as makers of curtains, portières, and wall hangings, together with sculptors and painters, add to the exposition of household decorations as understood in this country of home-loving people.

In contrast with these is the exhibit of the Swedish tourists' clubs, showing not only typical costumes and outfits but the attractions offered the pleasure seeker. There are models of snow-skates, toboggans, and sledges propelled by the foot; sections of boats that have been used by the Royal Swedish sailing club ever since its foundation; reproductions of yachts and fishing boats such as ply along the coast of Sweden; skates for racing and for military service, with the sails by which skaters are propelled, and yachts that skim over the ice.

In the background is a large picture of the capital of Sweden with its royal castle, near which are life size figures in wax attired in national garb. In panoramic form are shown a Swedish landscape and a Swedish cottage with its inmates; while of landscape paintings belonging to legitimate art, the best are those of the Ljungans river valley. There are hunting scenes in which the bear and fox are the central figures; Lapps are depicted roaming over



ENRIQUE DUPUY DE LOME

CARLOS R. GALLARDO, ARGENTINE  
REPUBLIC





THE SPANISH BUILDING



INTERIOR OF SPANISH BUILDING

their snow-covered plains, and on canvas are transcribed the most striking views in the neighborhood of Stockholm, with its approach by sea. In statuary the bust of Gustavus Adolphus is a well executed composition, and in portraiture there are Charles XII and Oscar II. Thus it will be seen that here, as in the palace of Fine Arts, the works of native artists incline to domestic themes and personages.

In the galleries are the exhibits which illustrate the prevailing systems of mental and physical education, together with a large collection of publications, globes, and instruments, forming the Swedish section of the



OFFICIAL RESIDENCE OF GUATEMALAN COMMISSION

Liberal Arts department. From the directress of needlework at the public schools of Stockholm comes a series of models illustrating her system of instruction, while the most approved methods of teaching sloyd are represented by the normal school at Naas. Technical schools and special institutions display the articles made by their pupils, the Agricultural society of Blekinge having a series of models in woodwork, with textile fabrics and objects fashioned of bone. Elsewhere, in drawings, photographs, models, and apparatus, the Royal and other gymnastic institutes show what is being done in the way of physical training.



MANUEL LEMUS

Viewed in its entirety, the Swedish exhibition forms a complete presentation of the industrial and social condition of the kingdom, and for this much credit is due to the royal commissioner, Artur Leffler, whose zealous and intelligent efforts are worthy of all commendation. Swedish day fell on the 20th of July, and was quietly celebrated. A parade including many societies was reviewed in front of the national building, assembling later in Festival hall, where a concert was held, after which came fireworks and a procession of floats.

Norways' contributions to the Fair are divided among several departments. Her fisheries' exhibit is one of the best of its kind; in the hall of Manufactures is a large display installed in a pavilion of Norway pine; in the agricultural section the groups, though small, are remarkable for their attractive setting; while the Norwegian gallery in the Art department is not unworthy of the genius of her



painters. The government building, in which are no exhibits, is a unique composition of the Stavkirke style of architecture, representing a church of the twelfth century, a cross-gabled edifice, with peaks ornamented, as in the days of Leif Erikson, with the prows of Viking ships. It is fashioned entirely of Norway pine, was built in Norway, and is said to be a specimen of the structures manufactured by Norwegian firms for shipment to Mediterranean and other ports. The idea of an old Norse church is also carried out in the interior decorations, in the massive beams and simple but effective carvings.

Several times during the term of the Fair the Norsemen held celebration. The two most noteworthy occasions were the arrival of the Viking ship from Norway, described in the Transportation chapter, and the dedication of the pavilion, on May 17th, in commemoration of the 79th anniversary of independence. The procession, which marched to Festival hall, consisted of Scandinavian workmen, members of Norwegian lodges, riflemen, turners, and a number of girls in native costume—blue skirt, with bands of red braid around the

bottom, a bright red waist with white sleeves, and a white apron. Knute Nelson, governor of Minnesota, spoke in his native tongue; and Congressman Haugan, of Wisconsin, and Julius E. Olson of

the state university were also among the speakers, the latter making some pertinent remarks on the occasion which they had met to commemorate.

The Turkish building, opposite the Fisheries pavilion, is a small but unique edifice, typical in style of architecture and with oriental decorations. Its plan is in imitation of a fountain opposite the Babi-Hama-Youn in Constantinople, erected some two centuries ago by Sultan Ahmed III. The exterior is entirely covered with wood carvings executed in Damascus specially for the purpose, and it is estimated that twenty workmen were employed for six months on these panels of intricate design.

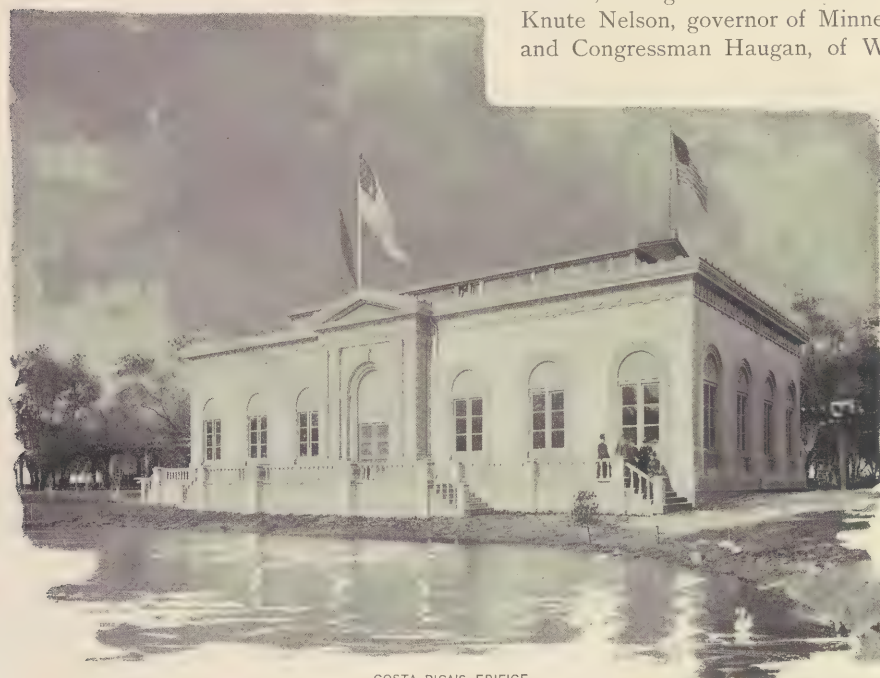
The structure is used for

displaying the collective exhibits from all the countries over which the star and crescent flies. Most of them are fabrics of such fine texture and intrinsic value that they are protected by glass cases, which form an irregular circle around the room and rise to the ceiling. In the centre is a star-shaped case and around it are grouped the exhibits of mechanical and scientific productions, a display which tells of remarkable progress within the last few years. Turkish rugs and pearl inlaid work from Damascus take the lead, but gold and silver embroidery and silks, ranging in color from the most delicate tints to the most gorgeous hues, occupy much of the space. Chibouques, their long stems covered with gold and jewels, beautiful silver ornaments, bracelets, ear-rings, and the high-heeled pattens worn in Turkish baths, are side by side with ship torpedoes, soaps, scents, minerals, and coffees.

Back of the main building are the quarters of the imperial commission, with offices, a coffee-room, and a large reception room, decorated with gaily-colored silks, embroideries, and tapestry, with divans of oriental fashion, native furniture, paintings, and bric-a-brac.

On the opening day, the 26th of June, the building appeared at its best, and was the theme of general comment by hundreds of foreign and state commissioners, Fair officials and invited guests. "Long Life to the Sultan," was the inscription above the portals through which they passed between lines of Syrians and Bedouins from the Midway plaisance, gorgeously attired. The visitors were presented to Ibrahim Hakky Bey, commissioner-general, and to the imperial commissioner, Ahmed Fahri Bey, then to the other members of the commission, after which they were escorted through a group of gaily costumed Turks to the reception room, the space between it and the main structure containing a Turkish marquee.

Luncheon was served in Turkish fashion, except that champagne took the place of coffee, and there was music by the Second Regiment band of Chicago. Assisting Hakky Bey and Fahri Bey were several of the members of the commission, Charles Henrotin as consul-general and Sursock Effendi as consul acting as hosts. All the



COSTA RICA'S EDIFICE



MANUEL M. DE PERALTA



COLOMBIA'S EDIFICE

of a suitable edifice. In 1482 it was completed; and in its reproduction is well represented the composite architecture of the times. It is a massive structure of buff sandstone, the square tower at one end, the arched doorway, the pointed windows, each terminating in a cross, the fretwork ornamentations, the mail-clad warriors, the figures symbolic of commerce and finance, the heavy cornices, and the parapets solid as those of a fortress, all being faithful copies of the original. The interior is almost devoid of architectural ornaments, except that it is divided in the centre by a row of cathedral-like pillars which extend to the roof, with a series of pilasters on either side. A circular stairway leads to the tower, a fac-simile of the prison used in the

Turks wore European costumes, Prince Albert coats, black trowsers, neatly fitting gloves, and on the head a red black-tasselled fez. The ceiling was draped with the rarest of Turkish silks, and the walls were covered with hangings of the richest quality, attendants in the garb of the orient and occident being stationed in the doorways and corners. A few short speeches were made; but there were no formal exercises, and this was declared to be one of the most pleasant receptions ever held in Jackson park.

Spain's official building was modelled after the historic merchants' exchange building at Valencia, known as La Lorja, built in the style of architecture which marked the transition period from the Gothic to the renaissance. While Columbus was in Lisbon soliciting the aid of king John, the silk merchants of Valencia were negotiating with one Pedro Comté, a leading architect of the day, for the erection



CARLOS MARTINEZ SILVA

original for bankrupt or defaulting merchants.

In oil paintings, engravings, prints, and photographs are represented many historic and modern incidents and personages. Near the main entrance is a large painting of Ruiz Luna, entitled, "October 12, 1492," showing Columbus and his crew in two small boats, the caravels being anchored in the offing. Elsewhere the discoverer is represented as before the catholic kings, and here is the hall of the ambassadors at Seville, where centres so much of the history of the Columbian era. Moorish palaces and noted battle-fields, with such famous haunts as the garden of the Escorial and the cloisters of the Toledo cathedral, are reproduced in oil and water colors. Rome and Egypt are freely drawn upon for subjects, among them sketches of famous temples, while one of the most powerful paintings in the entire collection is Arpa y Perea's



VENEZUELA

"Pompey's Funeral;" the body resting on a blazing pyre, the stolid Moors seated near by on the banks of Nile, and the pyramids in the distance, as nearly symbolic of eternity as handiwork of man can be. Not far away





THE BRAZILIAN BUILDING FROM THE NORTH POND

the commanding features of Cortés appear in contrast with studies of old-time and modern peasants, Catalan, Valencian, and Andalusian. There are also the interiors of farm-houses, landscapes peaceful and wild, vineyard scenes, and scenes of the mountain and the plain. Specimens of steel and copper etchings are plentiful, and there are drawings showing the plans and decorations of theatres, circuses, hospitals, and public buildings, with carvings in ivory of religious and architectural themes.

La Lonja, it may here be said, was selected for reproduction partly because the Spanish minister at Washington and the commissioner-general, Enrique Dupuy de Lome, were natives of Valencia, the latter preferring as his official headquarters a structure which represents one of the architectural features of that ancient and historic city. The edifice, together with the Spanish pavilions in all the general departments, was



ARCHITECTURAL FEATURES OF THE BRAZILIAN BUILDING

opened by Princess Eulalia on the 13th of June. The ceremonies were of the simplest and without formality, the building being tastefully decorated in honor of the occasion, though only completed a few hours before the arrival of the royal party. The princess passed to the entrance-way between borders of yellow daisies, under a canopy of Spanish and American flags, a military band playing the national anthem of Spain. Then came luncheon and the reception of a few friends, with more music, and La Lonja was open to the public.

First among the headquarters of the Latin-American nations may be mentioned Guatemala's building, near the verge of the north lagoon and southeast of the Art palace. The exterior is of Moorish architecture, with interior plan of home design, and with excellent arrangement for their intended purposes of the roomy and well lighted halls. The structure is of wood and staff, its sides adorned with pictures of tropical plants, of which living specimens are freely displayed in the grounds adjacent, including the finest collection of orchids in Jackson park. In front is a comfortably furnished sitting-room, its walls and columns draped with the national colors. In the centre is an open court, with galleries supported by colonnades, as is the fashion in Spanish-American countries. A terrace extends to the edge of the lagoon, where a landing faces the principal entrance, and for the further accommodation of visitors there is a rustic pavilion partially surrounded with agave and coffee plants, where by waiters attired in the picturesque costumes of the country is served a beverage that rivals the extract of the Mocha or Java berry.



MIGUEL SERRANO, DELEGATE GENERAL  
FOR MEXICO

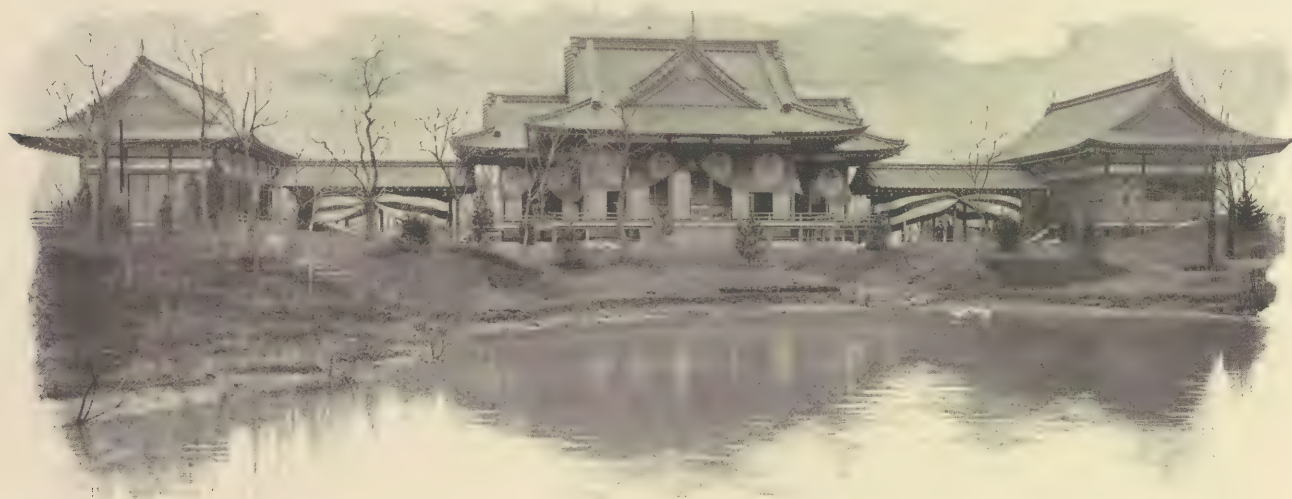
In common with other Central and South American countries, the exhibits of Guatemala are contained almost entirely within its government building. In the eastern wing a spacious hall is stored with manufactures, relics, and works of art; and here perhaps is the most interesting feature of the display; for while Guatemala is not a manufacturing country, she possesses most of the elements and in embryo many of the industries needed for such development, awaiting only the advent of capital and well directed enterprise. Among the articles arranged in show-cases are silk, woollen, and cotton fabrics, embroideries, clothing, mattings, hammocks of hennequen and agave fibre, musical instruments, crockery, and wooden vessels skilfully carved by hand. Of relics there are pre-Columbian and post-Columbian antiquities, the most valuable of which are included in the archæological collection of Manuel S.

Elgueta, while in art there are photographs, statuary, and wax-works, if the last can be said to belong to the domain of art.

In the western wing are illustrated the flora and fauna, the agricultural, horticultural, and mineral products of the country, so grouped as to convey a general idea of its resources. Here are maize, wheat, barley, beans, lentils, sesame, and other cereal, leguminous, and herbaceous plants. There are all the fruits of tropic and



M. V. ARIZAGA, COMMISSIONER GENERAL FROM ECUADOR



TEMPLE OF HŌŌDEN, JAPAN

temperate climes, with spices, frankincense, oils, dyes, fibres both animal and vegetable, herbs both edible and medicinal, rubber, storax, tobacco, and a large assortment of cabinet woods. Coffee, the staple of Guatemala and forming the bulk of her exports, is largely represented; nor should we omit the samples of sugar and of Soconusco cocoa, the latter in demand wherever cocoa is used as a beverage. Of mineral products there is a valuable collection; for while mining receives but little attention, the country is by no means lacking in mineral wealth. Geological specimens are also numerous, and in map form are further illustrated the geological, as well as the topographical and hydrographical features of the republic.

In Costa Rica's home at the Fair is housed a choice collection of exhibits from this enterprising and prosperous nation, the connecting link between the two Americas, and often styled the Yankees of Latin-America. Here is represented a region rich in resources, mineral and agricultural, with plant and forest growth of tropical luxuriance, the former of commercial value for manufacturing purposes and the latter for cabinet and construction timber. In educational matters Costa Rica is far in advance of her sister republics, supporting some 350 primary schools, in addition to high-schools, a university, and national and agricultural colleges, for the maintenance of which was voted in 1892 more than \$500,000, or one tenth of the total appropriation. In other respects the country is no less progressive, having a large and increasing trade with Europe and the United States, with excellent postal and telegraph systems, and with railroad connection between the Atlantic and Pacific.

Situated on the eastern verge of the north lagoon, the building forms a neat and airy domicile, with a score of double casement windows and ten large skylights



H. GUZMAN, NICARAGUA

on the roof. In the front a spacious piazza stands on the brink of the waters, and on each side is a portal flanked by Doric pilasters, above it the shield of the republic in bold relief. The iron frieze and cornices are of tasteful design; the outer surface is painted in effective colors, and the inner walls frescoed in suitable designs. The structure is partially surrounded with trees, their foliage masking the open doors and windows with a curtain of living green. The entire effect is that of a cool and cosy retreat, a pleasant resting place, but one where there is also much of interest, much that is novel and unfamiliar.



A ROOM IN THE TEMPLE

The interior forms a single room or hall, without partitions and with a gallery around its walls. The exhibits suggest a country rich in raw materials, most but not all of which can be manufactured to better advantage by older communities. Coffee and bananas are the staple exports of Costa Rica, and these are freely displayed, together with other products of the soil and sea. Of agricultural and vegetable specimens there are such as are raised in common with other countries, and there is one that is probably found in no other country. This is known as "vegetable ivory," almost as hard and white as tusk of narwhal, but nevertheless a seeding plant and one that is now being cultivated for manufacturing purposes. Of rubber there are many kinds; of medicinal plants a large

variety, and among woods there are mahogany, as common almost in Costa Rica as the oak in Pennsylvania, and the cedron, whose surface when polished shows colors such as no painter can depict.

Of exhibits of metals and minerals there are gold, silver, nickel, copper, lead, iron, zinc, sulphur, and bismuth; these with clays, building stones, and earths of commercial value being widely distributed in Costa Rica and in paying deposits. Manufactures are shown for the most part in primary forms; but there are jewelry, hardware, and cabinet work of excellent quality, with intricate and ingenious designs in sea and tortoise shells. Of raw silk there are several cases and of textile fibres, both animal and vegetable, there is a liberal display, the latter, when passing into domestic use, being fashioned into the roughest of home-made clothing.

In the gallery are landscape and other paintings by prominent artists, with portraits of historic personages, the former representing mainly the scenic wonders of the cordilleras. Here also is a collection of birds, indigenous and some of them peculiar to Central America, as the kelzal, a large and beautiful species with brilliant plumage, but one that cannot live within a cage, and hence was adopted by Guatemala as one of the emblems impressed on her seal of state. There are also varieties of the canary, which in Costa Rica is plumed in yellow, black, or white, and again in a mixture of all these colors. There are no live birds or beasts within the building, except for a cage of diminutive monkeys, with abnormal tufts of hair crowning their tiny and wrinkled foreheads. Finally there are ethnological and educational exhibits, the former consisting mainly of Indian relics and weapons.

Almost facing the Guatemala building is Colombia's tiny home at the Fair, a white two-story edifice, dwarfed by the towering structures of

Germany and Sweden. In style it is of the Italian renaissance, a domical glass roof rising abruptly from the centre surmounted by the national emblem, a condor with outstretched wings, on either side of which is a group of figures supporting a globe, and above this a flag-staff whence the national colors are displayed alternately with the stars and stripes. In the panels under the dome are inscribed the names of President Nuñez and Vice-president Coro, with those of Bogota, the capital, and the nine political departments.



GROUP OF JAPANESE

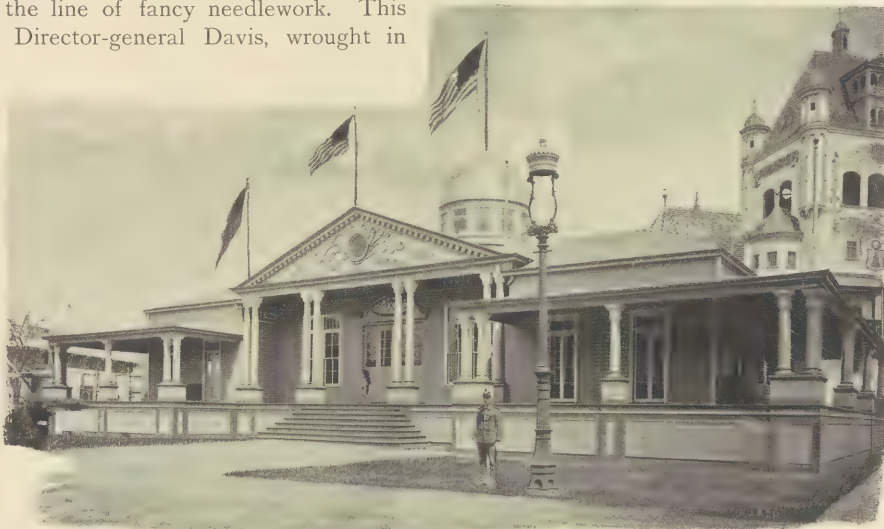


On the ground floor are small but interesting collections which speak of the history, products, and fauna of the country. From the graves of Indians, some of them representative of prehistoric times, come specimens of idols and images, pottery, wood-carvings, water bottles, helmets, trumpets, breastplates, necklaces, and bangles and anklets of gold. In wax statuettes are shown the features and physique of the natives, attired in garments fashioned by themselves, and there is at least one article which is proof of native skill in the line of fancy needlework. This is a silk-embroidered portrait of Director-general Davis, wrought in colors from a photograph taken by a female artist of the Quimbaya Indian tribe. Colombian coffee, especially such as is raised in the vicinity of Bogota, is prominently displayed, while cotton, another staple export, is exhibited in such manufactured forms as hammocks and clothing. There are also not a few specimens of gold; but more beautiful than all is the collection of moths and butterflies native to the country, and with all the rich hues which nature lavishes on the insect life of the tropics.

For Venezuela's mansion was erected a one-story building of marble in three divisions, with Græco-Roman façades and domical roofs, those above the wings being surmounted with statues of Columbus and Simon Bolivar. Within is sufficient evidence that the latter is held in esteem, not only in his native country but in Peru and elsewhere, as the hero of South American independence. A sword with 1,400 brilliants, a belt with three-score precious stones, a saddle cloth weighty with golden braid, and "El Sol de Peru," ablaze with diamonds, are all presents from the Peruvians, whose liberty he won in the campaign which ended at Pichincha in 1822. There are also the swords that he used in action, and on one of the walls is the banner which Pizarro carried to conquest, presented nearly three centuries later to the national congress, by congress to the marischal de Ayacucho, and by the marischal to Bolivar. Finally there is a medallion portrait of Washington, a present from his family and handed to the deliverer of five republics by Lafayette, thus linking together the three central figures in the achievement of New World liberty.

The material riches of Venezuela are freely displayed in her classic pavilion, tastefully decorated in yellow, blue, and red, colors symbolic of the state. First among the raw products is coffee, of which 1,500,000 bags a year are exported or consumed. There are also silk, wool, cotton, and other fibres; native woods, including dye-woods; tonka beans and tobacco; oils, gums, and nuts. Of minerals there are asphaltum, petroleum, and copper ore, the last from a mine which is said to be the second largest in the world. Of manufactures there are chocolates, starches, soaps, hammocks, basket-work, and leather in several forms, with saddles mounted in silver and embroidered in silk.

But the art collection is the feature in Venezuela's pavilion; this, as I have said, being excluded from the general display, through tardy application for space, though belonging to the department of Fine Arts and as such examined by the international board of judges. There are but twenty-five works in all, and with only six artists represented; their paintings grouped in the main hall around a central dais. First among them may be mentioned Cristóbal Rojas' "Purgatory," a vigorous but gruesome composition, showing the souls of men and women writhing amid the flames, an angel hovering above with messages of peace which fall on ears that cannot hear. This work, as is related, cost the artist his life; for in order to give realism to his conception he studied daily for several hours the effect of the flames in Parisian smelting works, inhaling the poisonous atmosphere and thus inviting the attack of consumption which



THE HAYTIAN BUILDING



HAYTIAN EXHIBITS



A. VON PALITSCHKEK-PALMFORST, AUSTRIA



J. PERRENAUD, SWITZERLAND



H. E. P. GLOUKHOVSKOY, RUSSIA



V. I. SHOPOFF, BULGARIA



GEORGE BIRKHOFF, JR., NETHERLANDS



D. JANNOPOULO, GREECE



MARQUIS ENRICO UNGARO, ITALY



A. MACKIE, MONACO



A. B. KING, LIBERIA



J. J. QUELCH, BRITISH GUIANA



E. R. GROBLER, ORANGE FREE STATE



PHRA SURIYA NUVATR, SIAM



CHUNG KYUNG WON, COREA



W. E. ROTHERY, LIBERIA



ended his career. In all his works is a certain sadness of tone; for the genius of sadness possessed him, even at the time when he was sent as a student to Paris to complete his training at the expense of the Venezuelan government.

Arturo Michelina, who now stands at the head of the Venezuelan school, has several canvases showing his range and grasp of art. His portrait of Bolivar is the only one exhibited in the art chamber; but there are others elsewhere in the pavilion. In "Charlotte Corday Going to the Scaffold," the central figure is passing through the door of her cell, the eyes of a young artist following her with fixed and sorrowful gaze, while the jailer is carelessly lighting his pipe; for to him such scenes are of daily occurrence. "Penthesilea" is one of Michelina's strongest works, and here the Amazon queen is represented not as Virgil describes her:

*Penthesilea furens, lunatis agmina peltis,  
Ducit Amazonidum.*

She is wounded and some of her followers are bearing her from the field, while all around her the battle rages, and men and women lie prostrate dabbled in their blood. "Charity" is a most powerful study, and by many considered the best of Michelina's canvases. A woman is lying on her death-bed, with a child at her side, and except for the pallet on which she rests, there is no article of furniture and not a morsel of food in this home of poverty and woe. A lady and a little girl are entering the room with relief that comes too late,

and the look in the eyes of the dying woman is one that they will never forget.

The Brazilian building is the most ornate of the South American pavilions, one in which the artificer has given full rein to his fancy; for by the Exposition management there were no restrictions as to the designs of state or foreign structures; only that they must be attractive and in harmony with the general plan. In style it is of the French renaissance, nearly 150 feet square, and surmounted by a dome 120 feet in height from floor to finial, around which



THE WHITE HORSE INN

are campaniles, each with an open observatory. On each face are columns of the Corinthian order, and on the façades and the stylobate of the dome are Indian and other figures symbolical of the republic. The ground floor is almost without partitions and devoted mainly to the exhibit of coffee. On the upper floor the assembly room is handsomely draped and furnished; in its centre a group of palms and ferns, above which is a figure of Mercury. There are also ladies' reception parlors, and in rear of the building is an annex where by native waiters is served such coffee as nowhere else can be had; for as the Brazilians claim, the art of roasting the berry and preparing the beverage is unknown in the United States.

In the central hall are more than 2,000 specimens of the 370,000 tons of coffee yearly produced in Brazil, or about two thirds of the world's supply, one half of it coming from the state of St Paulo. The samples are ranged in glass jars grouped on tables or in pyramidal form, and represent the greatest of Brazilian industries; for nearly all the coffee sold as of the Mocha, or Java varieties comes from the southern republic, whose choicer products are not inferior to either.

In addition to the Brazilian collection in the palace of Fine Arts there is one of equal merit in the government building, including Pedro Americo's famous painting of the "Proclamation of Brazilian Independence" by the emperor in 1822. "Tiradentes," by Aurelio de Figuerdo, represents the execution of this proto-martyr of Brazil. Antonio Parreiras has three canvases, one of which is a "Panorama of the City of Nictheroy." Insley Pacheco has a number of landscape views, most of them from the neighborhood of Rio Janeiro, whose harbor is the most picturesque in the world. Among portraits is one of General Deodoro by Henrique Bernardelli,



TONKIN COLONY BUILDING

decorations supplied by the Tokio academy, and the furniture and works of art by the Imperial museum. In the architectural scheme are illustrated three historic epochs. The main hall represents the style of the Tokugawa period, dating back a century and a half, reproducing the sitting-room of one of the great lords of these days. The south wing is planned as in the Ashikaga era of the fifteenth century, and the north wing after the golden or Tujiwara era of 850 years ago. Native woods form the body of the temple, its roof being covered with sheets of copper. The ceilings of the main hall are divided into panels of lacquered wood, those of the two side rooms being elaborately decorated with phœnixes in gold and colors, with similar figures on the walls and sliding doors.

Near the German building Hayti erected a modest pavilion of the southern colonial style; with broad piazzas on three of its sides and surmounted by a central cupola, from the flagstaff of which is displayed the national standard in horizontal stripes of red and blue. Above the main portico is the coat-of-arms, and below it, in gilt letters, the words *République Haitienne*, with the figures 1492, 1892, and 1804, the last referring to the acquisition of independence. Of the interior space a large portion is occupied by a central hall, draped with festoons of colors, and in the centre a statue of "Rêverie" by a native artist. Relics are freely displayed; among them the rapier of Toussaint L'Ouverture, while others refer to the Columbian era and to the aboriginal inhabitants, including one of the anchors lost from Columbus' flag-ship in 1493, the other being placed at the entrance to the convent of La Rabida. There are also portraits and busts of prominent men, as of the Haytian liberator, of the first president of the republic and of Frederick Douglass.

All that Hayti has contributed to the Fair is contained within her pavilion, where first of all are native woods, some polished and others in their natural state, the most massive specimen being a huge block of mahogany. There are also minerals, fibres, needlework, laces, embroideries, and various articles of manufacture, especially in leather, including some highly finished saddlery. Coffee is a feature in the display, and of this there are some two-score varieties, the beverage itself being served in an apartment in rear of the hall. Of sugar there are numerous samples, these with syrups, liquors, liqueurs, and a few other articles completing the Haytian exhibits.



JAPANESE TEA GARDEN

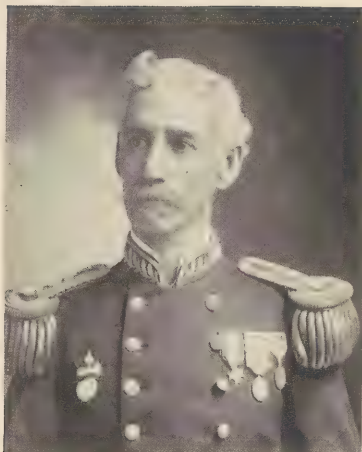
WORLD'S FAIR MISCELLANY.—The French colonies are represented at the Fair by several buildings, among which may be mentioned those of Tonkin, Tunis, and Algeria. The first is identical with that which was erected for the Paris Exposition of 1889. It is a rectangular structure, its interior partially finished in walnut, with stained glass windows, and is covered with Chinese hieroglyphics, some of which date back to the days of Confucius.

In connection with England's participation in the Fair may be mentioned the White Horse inn, a reproduction of a famous hostelry at Ipswich, where excellent meals and the choicest of liquors were served at somewhat extravagant prices. But to many the main attraction was the barmaids brought from England for the occasion. All were of the better class, never indulging in flirtation, and serving their tankards of ale or glasses of mulled port or claret, in the making of which they were spe-

and by Girardet is a medallion of Benjamin Constant, leader of the revolution by which Dom Pedro was deposed.

The Japanese commissioners erected as their headquarters a small structure near the northern extremity of the wooded island, where it is partially concealed by trees and shrubbery. In the vicinity is the temple of Phoenix, called Hōōden in honor of the mythical bird of Japan, and in part a reproduction of the historic edifice of that name built more than eight centuries ago at Uji, the original of which is still in a fair state of preservation. It is of two stories, with a wing at either side and a corridor at the back; its design prepared by the government architect of Japan, the interior





REAR ADMIRAL AURITY

tained as guests of the city and the World's Fair directory. Before the celebration of Irish day, in which he was the central figure, the mayor paid several visits to the Exposition, and on the 28th was invited with his party to a luncheon given by Sir Richard E. Webster, chairman of the royal commission, and Sir Henry Trueman Wood, its secretary. In the afternoon they attended a reception at Lady Aberdeen's village, tendered by Mrs Peter White, its manager. At night the mayor and several of his party were feasted by the city council. There were flowers in profusion, with music by Tomaso's mandolin orchestra, and the choicest of viands and liquors, among them "punch à la Shanks," of which his lordship doubtless partook. There was also speech-making, of course, but not enough of it to mar the feast. Other banquets and receptions were given by Sir Richard, who was appointed attorney-general during the first of Salisbury's terms, and is the youngest man who ever held that position. He is a gifted orator, and except perhaps for Sir Charles Russell, none stand higher in the profession, whose members say that it is almost impossible to draw up a document or prepare a case in which he cannot find a serious flaw. This the American advocates found to their cost during the sittings of the Bering Sea commission; for while all were able lawyers, they were no match for the ex-attorney-general. Of the Fair Sir Richard remarked: "The architecture is simply marvellous in its beauty, and the vista down the lagoons and the effect of the buildings from the water is beyond description. Surpassing even the dreams of oriental dreamers is the effect in its entirety of this wonderful Exposition."



FRANCISCO E. BUSTAMAULE

cially skilled, with strict attention to business. They were well-favored, bright-eyed, buxom, and trim; each with light auburn hair, for this was a necessary qualification, and in neat but orthodox attire, with bib and apron of spotless white.

James Shanks, lord-mayor of Dublin with his wife and party, among whom were two Irish members of parliament, arrived in Chicago on the 25th of September and met with a cordial welcome, being enter-

tion from the thousands of his countrymen who were present. The Bohemian societies gave an exhibition of athletics in the Live-stock pavilion, in which the participants were of both sexes.

August 31st, the thirteenth birthday of Wilhelmina, queen of the Netherlands, was a feature among the foreign celebrations. Exercises at Festival hall inaugurated the day, the chairman being George Birkhoff, commissioner-general and consul. After speeches, varied with music, the assemblage adjourned to the Japanese village, which was closed to all but the Dutch and their descendants. Here they were entertained by native dancers and musicians, drank coffee, and enjoyed themselves to their hearts' content.

On Mexican day, the 4th of October, the celebration was warmly supported by the Exposition management; for Mexico was among the first of the nations to respond to their invitations to take part in the Fair. Miguel Serrano, commissioner-general rang



S. TEGIMA, JAPAN



SCENE WITHIN THE JAPANESE GARDEN

the liberty bell; Commissioner McDonald of California welcomed the Mexicans, and after music by one of their most famous military bands President Palmer welcomed them again. In the recital and music halls Mexican shields and flags were profusely displayed, together with the stars and stripes, while bronze busts of Hidalgo, President Diaz, and Washington were objects which spoke of the friendly relations between the two republics.

Guatemala's inaugural day, the 3d of July, was celebrated with simple but impressive ceremonies, attended by many of the foreign commissioners and the leading officials of the Fair. Two days later the Costa Rica and Venezuela buildings were formally opened. At the former there were no special exercises, M. M. Paralta, as United States minister, welcoming his guests in brief and courteous phrase. Consul-general



CHARLES A. PRESTON

Saldivia spoke on behalf of Venezuela, Francisco E. Bustamaule, his associate commissioner and minister at Washington, accepting the building on behalf of his government. Costa Rica's celebration was held on the 15th of September, the day on which Central America declared her independence in 1821. There was a reception in the state pavilion, attended by many of the foreign commissioners and Fair officials, including the Board of Lady Managers.

Colombia dedicated her home on the 20th of July, the 83d anniversary of her independence or rather of its declaration; for freedom was only purchased after a cruel and protracted war. As head of the commission, Carlos Silva delivered the principal address, the sons of President Núñez being among his audience. Brazil opened house on the 19th of July, and held celebration on the 7th of September, on which day of 1822 Dom Pedro I, governor of what was then a Portuguese colony, receiving word from his father, the king, that the liberties of the country were to be curtailed, proclaimed its independence. On the former occasion the only speech was by Lemos Basto, president of the republic. On the latter there was no speech making; merely a concert in the music hall, followed by a reception in the government building, Rear-Admiral Maurity being president of the commission.

On a plat of ground sloping gently to the banks of the lagoon, between the Brazilian and the Fisheries buildings, are two small structures of wood and bamboo enclosed by a low, light fence. Here is the Japanese tea house; its floors covered with matting, cushions, and arm-rests, for the accommodation of those who

would partake of the beverage as prepared and served by native attendants.

Of the many banquets tendered by foreign commissioners none exceeded in luxury, taste, and hospitality the one given by the Japanese commissioners, Tegima and Matsudaira. For the occasion the banqueting hall of the Auditorium building was ornamented with the flags and shields of all nations, prominent among which was the banner of Japan, with its disk of red on a field of white. The balcony was draped in crimson velvet, and on a line with the columns which supported it was an array of wonderfully decorated vases, filled with lilies and begonias. On the tables were smaller vases containing flowers of every hue; elsewhere rose-bushes and orange-trees were disposed at intervals, with a background of palms and laurels. The guests were welcomed by Tegima, who called attention to the Japanese Exposition to be held in Kiôto in 1895, commemorating the 1,100th anniversary of its selection as the national capital. In response, Thomas B. Bryan, as chairman, spoke of the generous part which Japan had played in the affairs of the Columbian Exposition.

Hayti dedicated her building on the 2d of January, the 19th anniversary of her independence, Frederick Douglass, one of the commissioners, with Charles A. Preston as associate, delivering the opening address, to which Director-general Davis responded. A special fête day was appointed for the 16th of August, when there was a reception in the state pavilion, followed by a banquet at the Richelieu hotel.







## CHAPTER THE TWENTY-SIXTH

### THE WORLD'S CONGRESS AUXILIARY

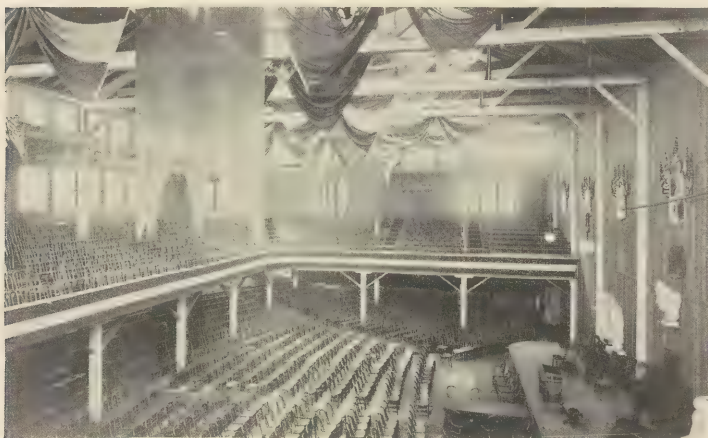


OF the origin and purposes of the Congress Auxiliary, its scope and character, mention has been made in an early chapter of this work, in connection with Exposition management. As stated in substance by the officials themselves, its general objects may thus be briefly recapitulated. As an adjunct or supplement to the Fair, it was intended to provide for a fitting representation of the intellectual and moral progress and condition of the civilized world, with the assistance of the foremost men and women in each department. Here was a convenient time and place in which the members of kindred organizations might assemble for the consideration of living questions relating to every phase of civilized life; might prepare and in a measure secure the execution of more comprehensive plans than had ever before been formulated "to promote the progress, prosperity, unity, peace, and happiness of the world."

It was in truth an ambitious programme; but one which, as I have said, received the endorsement and coöperation of acknowledged leaders in every sphere of human thought and achievement. It was, moreover, a novel feature in the annals of international expositions; nor was it merely an appendage but an integral part of the Fair, one sanctioned by congress and authorized by the directory. Here expression was given to the subjective, just as in the material display were expressed the objective conditions and relations of modern civilization. Of those who attended or took part in the meetings a large proportion were foreigners, and to many the congresses were the most interesting portion of the Exposition. Coming as they did from cities better governed, more favored as to social environment, and with more of the comforts and amenities of life, they had now an opportunity such as never before existed for investigating, discussing, and comparing with their own the political, industrial, and other aspects of a nation whose existence is counted by decades instead of by centuries, and yet has solved not a few of the problems with which the old world is struggling.

The congresses were held in the Art institute recently erected on the lake front, in the business quarter of Chicago, and containing two large auditoria, named Columbus and Washington halls, each with a seating capacity of 3,000 persons, these with smaller chambers permitting a series of meetings to be held simultaneously. Funds for the occasion were in liberal supply, the Exposition directory contributing \$200,000, or one fourth of the total cost of the building, on condition that it be placed at the disposal of the congresses during the term of the Fair. The total attendance at all the sessions of the various departments was little short of 1,000,000, of whom at least two thirds were women, the audiences being mainly composed of the more intelligent classes, whether Chicagonese or pilgrims of the Fair.

As first it was organized, woman was entirely unrepresented in the Congress Auxiliary; and as in other departments, the prominent part that was later accorded to women was largely due to the efforts of Mrs Potter Palmer, as president of the Board of Lady Managers. Addressing a letter to the authorities, she asked that



COLUMBUS HALL

women and their interests be represented at its gatherings. The request was granted without demur, and it was further stated that no committee of women had been appointed merely because such a demand had been anticipated, the managers preferring that the suggestion should reach them from those who had women's interests in charge. Thereupon a woman's branch was established, with Mrs Palmer as president, and as vice-president Mrs Charles Henrotin, than whom none are better versed or more deeply interested in social and humanitarian questions. The result was not only a congress of representative women, attended by women from every quarter of the world; but that in the nineteen congresses held between May and October for the discussion of subjects ranging from political

science to household economics, women took part in all but three, these being electricity, engineering, and real estate.

First on the list were the congresses of representative women, their formal opening being on Monday, the 15th of May, and their sessions lasting the entire week. As stated by Mrs Henrotin, their purposes "included a presentation of the different fields of work in which women were extensively engaged, either as teachers, workers in the trades, in the liberal professions, or in philanthropic work." Though up to the middle of May the average attendance at the Fair was less than 30,000 a day, against 270,000 for its closing month, the women's congresses were far more successful than many that were held much later in the season. This was due not only to the fusion of the more important women's associations throughout the United States, but to the participation of foreign societies, whose representatives were here in force. On the first day the exercises began with an address from the president, Charles C. Bonney, who reviewed the origin and development of the Congress Auxiliary, presenting briefly an outline of its general plan, and acknowledging his indebtedness to eminent men and women for their suggestions, encouragement, and coöperation. As president of the woman's branch, Mrs Palmer delivered an address of welcome, followed by Mrs Henrotin and Mrs May Wright Sewall, who spoke of the part that women would play in the congresses. Then came the introduction of foreign



MRS CHARLES HENROTIN

representatives, with responses on behalf of foreign countries, this being continued at the evening session. Here was manifested the world-wide participation in the congresses; for among those introduced were women from nearly all European countries; from Canada, Iceland, Australia, and South America; other sessions being attended also by women from India, China, and Japan, from Mexico and Central America, though from the United States came more delegates than from all other countries combined.

On the following day an address was delivered in Washington hall by Elizabeth Cady Stanton on the civil and social evolution of woman, followed by one from Marie Stromberg on the evolution of the Russian woman. At the evening session Julia Ward Howe spoke of the moral initiative as related to woman, and Kate Tupper Galpin of California, on the ethical influence of woman in education. In Columbus hall the subjects treated were woman in relation to government and civil law, to science and industrial economics, one of the best papers being read by



GEORGIA CAYVAN

Lady Aberdeen, who selected as her theme woman as an actual force in politics. Thus the sessions were continued throughout the week, the topics covering the range already indicated. Señorita d' Alcala lectured on woman in Spain for the last four centuries; Madame Quesada and Baroness Wilson on woman's position in the South American states; Madame Janauschek described woman's place in the legitimate drama; Georgia Cayvan, the stage and its women; Modjeska, the endowed theatre,



MODJESKA



and Clara Morris, woman in the emotional drama. An interesting paper on a century of progress for women in Canada was read by a representative of the dominion. Others were on woman as a religious teacher, an educator, a writer, an artist, and in relation to trades and professions. These, however, form but a portion of the questions considered, the reading of some of the papers being followed by brief discussions on their subject matter.

Meanwhile other sessions and informal conferences were held in the minor halls, at which was treated even a wider range of subjects, one of which related to woman's dress and especially to dress reform. Lucy Stone advocated the Bloomer costume which years ago, in conjunction with Susan B. Anthony, she tried in vain to introduce, while Frances M. Steele would have her sex return to the clinging, transparent drapery of the Greeks. At these auxiliary meetings were represented many women's associations, clubs, and leagues, among the speakers being Julia Ward Howe, Susan B. Anthony, Florence Fenwick Miller, Mary Livermore, Laura Ormiston-Chant, Clara Barton, Mary Frost Ormsby, Jane Cobden Unwin, and others too numerous here to



CLARA BARTON

be mentioned. On the Sabbath services were conducted entirely by women, a feature being the Marche Triomphale, rendered by the largest harp orchestra ever assembled in the United States.

Next to the congresses of representative women came those of representative journalists belonging to all departments of the press, the daily and weekly journals, religious, professional, trade, and scientific journals, with magazines and periodicals. As stated by the management, it was intended to provide for a proper presentation of the work and influence of the public press; to bring the most active and potent agencies of public opinion into more harmonious and useful relations, and as far as practicable to enable those who attended to see and hear the masters of journalism. The themes to be discussed were not chosen for special writers, but the writers for the themes, all the topics being carefully considered and the best men selected to give them fitting expression. Among them were the origin and development of the press; its duties, rights, and privileges; its legal and moral responsibilities; together with the art of news gathering, of reporting public proceedings, and of editorial comment.

On the 22d of May the press congresses were formally opened with an afternoon reception, followed in the evening by addresses of welcome and other speech-making. On the following day a session was held in Columbus hall, William P. Nixon as chairman introducing Alexander McClure, editor of the *Philadelphia Times*, who contrasted the power of the press and pulpit, claiming that the press had done more to conserve and liberalize the pulpit than all other causes

combined. In other vein spoke Murat Halstead, who has been termed the field-marshal of journalism. "There is a tendency," he said, "to claim too much for our work. Those of the press, if they are wise, will not assume that they are dedicated or consecrated more than other folk. They are not a sacred tribe nor a holy order, and though it may be well to urge reform, it is not well to make a fad of crusading. If the press would guide it must not drive, and while some have too little sincerity, others are earnest over much."

By each department of the press, religious, scientific, commercial, and others, separate meetings were held, some of the foremost journalists in Europe and the United States taking part in their proceedings; such men as M. de Blowitz, correspondent of the *London Times*; William T. Stead, editor of the *Review of Reviews*; John Brisbane Walker of the *Cosmopolitan*; Albert Shaw and Irving Brown of New York, and Joseph Howard, these being but a few of the men who passed a pleasant week in friendly intercourse, in sight-seeing, feasting, and merry-making.

Women were largely represented at the press congresses, holding separate sessions by day and attending at night the general meetings held in Columbus or Washington hall. The subjects discussed related to women's work in journalism, their duties



MOORISH GIRL



WILLIAM T. STEAD



MURAT HALSTEAD



CENTRAL COURT FROM ROOF OF MANUFACTURES BUILDING



responsibilities, and qualifications; what they could do in each department as news gatherers, as critics, editors and publishers. Then there were considered what may be termed the ethics of journalism; matters pertaining to personal fitness and conduct, with the relations of journalists to society, and especially how news may be obtained without violating the sacred privacy of home. Among the speakers were Mary H. Krout, chairman of the woman's committee, Helen M. Winslow, Kate Field, Mrs Frank Sheldon, Mrs Pauline G. Swalm, Mrs J. C. Croly, Mrs Lilian Whiting, Catherine E. Conway, Clara Bewick, and Susan B. Anthony. At the general sessions for men and women there were no prolonged debates; controversial points were avoided, and the problems of journalism freely and impartially discussed by the foremost members of the profession.

In the medical congresses which followed, a wide range of subjects was considered, both of a popular and scientific nature, including not only medicine and surgery, but dentistry, pharmacy, and medical jurisprudence, public health and the effect of climatic and geographical conditions in relation to health. Though many eminent men were present, the regular school of physicians was but imperfectly represented, for before the announcement of the medical congresses arrangements had been made for a general meeting in Rome. The eclectics and homœopathists predominated, the congress of the latter being in connection with the American institute of homœopathy.

At the opening session, on the 29th of May, there were the usual addresses of welcome, Marie E. Reasner speaking for her sex as chairman of the congress of eclectic physicians, while Alexander Wilder claimed that in



KATE FIELD

the eclectic school, as founded by Americans, lay the hidden secrets of the art of healing. In the afternoon the homœopathic hospital, near the Woman's building, was dedicated as official headquarters, and earlier in the day the homœopathic congress was inaugurated in Washington hall, with J. S. Mitchell as chairman and Julia Holmes Smith in charge of the woman's branch. In the hall of Columbus the congress of medico-climatology also held a session, among the speakers being Charles C. Bonney, Carter Harrison, and Roland G. Curtin, president of the National climatological association.

Throughout the week the several sections of the medical congresses presented topics of general, as well as of special interest. Women had much to say about the ills of their sex and of their offspring, especially as to the use of tobacco and liquor by fathers and of tea and coffee by mothers. Improper food and the nursing bottle were pronounced to be the cause of many of the diseases common to children, accounting also for weakly muscles and



THE COLUMBIAN FOUNTAIN

awkward gait. Such matters were considered as the relation of homœopathy to public health, the future of the school and its status in European countries. The afternoon sessions were devoted to subjects classified under the sections of surgery, gynecology, materia medica, clinical medicine, ophthalmology, otology, laryngology, and pædotrophy, the last named department being the one in which women explained their theories as to the scientific nourishment of children. During these meetings the fact was noticeable that surgery in relation to

other branches of medical science occupied most attention, and the same remark applies to the deliberations of the eclectic physicians and surgeons, their sessions concluding with the proceedings of the surgical department, of which R. A. Gunn of New York was president.



ANTHONY COMSTOCK

But of all the sessions perhaps the most popular were those in which representatives were present from India, China, Japan, Australia, Hawaii; from Russia, Italy, France, Switzerland, and other European lands; from South and Central America; from Mexico, and from every state in the union; physicians from all parts of the world assembling together to tell what they knew as to the effects of meteorological conditions on the human system. By one was discussed the effect of altitude upon heart and lung diseases, or a combination of both; by others the influence of elevated regions in relation to various ills. The results of bathing were considered, and the advantages

and disadvantages of sea voyages, while even such lofty themes were propounded as planetary influence upon the human body. The world itself was treated geographically, and those who knew whereof they spoke informed their hearers on such specific matters as the cause of eye diseases in Russia and Japan, and the effects of Chicago climate on the nasal and respiratory membranes. Consumption was a favorite topic, theories supported by arguments and statistics being advanced as to the influence of climate on this disease in the United States, in Canada, Mexico, Europe, China, India, Japan, Siberia, Africa, and Australia. Exercise and occupation were deemed important considerations in the treatment of consumption, and an instructive sub-topic was developed in the suggestion of national reservations for consumptives.

What may be termed a side issue of the medical congresses was a session of army surgeons, held in the Government building on the 9th of August, with Surgeon-general Senn as presiding officer, and attended, as were all the rest, by men of eminence in their profession; but as this was convened only for the discussion of special topics, and of little interest except to military men, it needs no other than passing mention. In the same month two days were devoted to the consideration of medical jurisprudence; much of the time being given to discussing the legal value of expert medical testimony. The degree of responsibility attaching to criminals of unsound minds, or when under the influence of liquor was among the mooted points, as also were the effects of opium on public health and morals, and the mysterious power of hypnotism, the latter treated solely from a scientific point of view.

During the first week of June was held a congress on social purity, Archbishop Ireland delivering the principal address at the opening session. The social evil was the main topic under consideration, and especially the licensing of that evil through legislative enactment. From England came a paper by Mrs Josephine E. Butler on parliamentary recognition of immoral practices, and by other speakers were treated the regulation system in France, Germany, and British India. At a session held under the auspices of the Woman's Christian Temperance union, one of the participants described her experience in connection with the Protective agency for women. Doctor de Costa spoke of the origin and purposes of the White Cross movement, introduced by himself and now freely aided by the churches, though without denominational bias.

The temperance congresses were held under the auspices of home and foreign temperance organizations, the representatives of many nations taking part in the discussions. As yet neither prohibition, local option, nor high license have gone far to remedy or even to check the evil; and if in cities and states where prohibition laws are in force, the drinking habit is less prevalent than elsewhere, statistics do not show it. It was to consider the causes and remedies for this common failing of humanity that the congresses were assembled, Archbishop Ireland and Frances E. Willard, as presidents of the men's and women's conventions, arranging the necessary details.

In truth it was a worthy purpose for which they were assembled, and one that called for earnest consideration as among the most necessary and yet the most backward of social reforms. While the temperance movement is almost a century old, it is very far as yet from converting the world to its cause. It was in 1808 that the first temperance association in the United States was formed in the New York town of Greenfield. Others followed quickly; but of all the doctrine was the moderate use and not the entire disuse even of distilled liquors, no restrictions being placed on indulgence in fermented drinks. That the crusade was not thus far of a serious nature appears in the by-laws of one of the societies, where, as a penalty for becoming intoxicated, any member so offending is required to treat all the other members. It was not until near the middle of the nineteenth century that the word "teetotaller" came into use, or that total abstinence was preached or practised even by a few. Thenceforth the movement rapidly increased,



MARY LIVERMORE





FRANCES E. WILLARD

organizations multiplying throughout Europe and the United States, with a total membership amounting far into the millions. Nevertheless the use and abuse of liquor has grown with the growth of population and of wealth, the sum thus yearly expended in the United States approximating the amount of the national debt, while in Great Britain, Germany, and Russia the consumption of intoxicating beverages is even on a larger scale.

At the temperance congresses held in June a feature was the convention of the Women's Christian Temperance union, at which, as vice-president, Lady Henry Somerset presided, in the absence of the president, Frances E. Willard. First spoke Charles C. Bonney and Mrs Potter Palmer as presiding officers of the Auxiliary and of the woman's branch, followed by Mrs Henrotin and Doctor Strong, after whom Lady Somerset paid eloquent tribute to her colleague and later read her report.

Archbishop Ireland briefly addressed the meeting, and at the first day's session delegates from England, France, Australia, Canada, Iceland, and Japan told how the work was progressing in other lands. The following day was mainly devoted to business, varied with brief addresses, the reading of one of the reports being interrupted by a memorial service in honor of Mary Allen West, who, as a missionary of the union, journeyed more than 3,000 miles in Japan, and after delivering nearly 100 addresses, died among those whom she had converted to the cause of temperance.

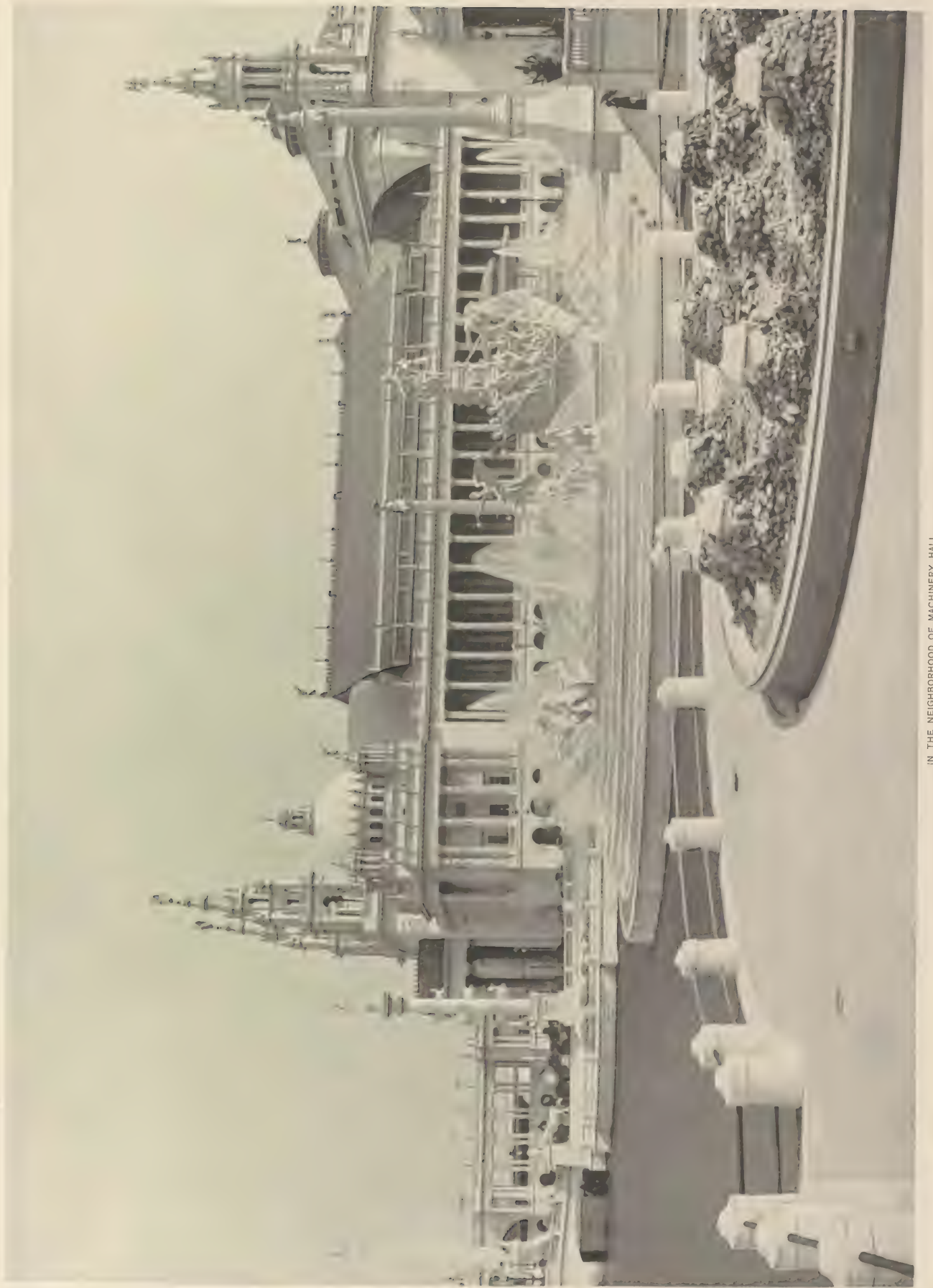
Among the speakers was Susan B. Anthony, who also discoursed upon the question of woman suffrage. John Hall of New York delivered a brief address of congratulation and was followed by Wilbur F. Crafts of Pittsburg, who proposed that in 1,900 a series of meetings lasting the entire year be held at different points throughout the world. As superintendent of her department, Mary A. Hunt reported that a law had been passed in all but six of the states and territories providing for the instruction of pupils in what is termed scientific temperance, 13,000,000 children thus receiving a compulsory training which, it was hoped, would act as a safeguard against the use of liquor. Colonel Parker, grand secretary of the order, acted as spokesman of the Good Templars, who, he said, were working on parallel lines with the union. As wife of a former prohibition candidate for the presidency, Mrs Bidwell spoke a few words on behalf of her husband. But perhaps the most telling speech of all was by Madame Zelma Borg, the Finland delegate, who declared that too much attention was being paid to the moral aspect of intemperance, and not enough to the physical. "Don't harp so much" she



SUSAN B. ANTHONY



VIEW FROM WOODED ISLAND



IN THE NEIGHBORHOOD OF MACHINERY HALL





CONGRESS OF KINGS' DAUGHTERS AND SONS

and dependent children; the care and treatment of juvenile delinquents; the hospital for the sick; the training of nurses and dispensary work; the commitment, detention, care, and treatment of the insane; the custodial care and the training and development of idiots and feeble-minded children; the prevention and repression of crime; the punishment and reformation of criminals, and the organization and affiliation of charities in cities. The department further includes the work of benevolent orders and associations of all kinds whose efforts are directed to the amelioration of social conditions."

Many were the associations represented at these meetings, and as most of them were controlled by women entirely or in part, the papers read were mainly prepared by women. Among those which attracted most attention was the congress of king's daughters and sons, an international organization of which nearly a thousand members were present. The opening was of a religious character, beginning with the singing of the "Coronation hymn," after which came scripture reading by Mary Lowe Dickinson and prayer by Isabella Charles Davis. Mrs. Henrotin spoke a few words of welcome, and was followed by Mrs. James M. Flower, chairman of the congresses. As president of the order, Mrs. Margaret Bottome spoke of the benefits which it had accomplished, telling of the letters she received from women far removed from all social privileges, yet in touch with the world through the efforts of the society, and aiding its cause so far as lay in their power. Other papers were read on this and the following day; Mary Lowe Dickinson, recording secretary, giving an outline of the work accomplished; Mrs. Elizabeth M. Tilley speaking in behalf of Canada; Mrs. Ida G. Stewart for Illinois; Miss M. Schott for Philadelphia; and Mrs. Margaret P. Bronson, who represented California, presenting to the president a Maltese cross of rare pebbles in the name of the members of the golden state.

At other congresses, both general and sectional topics of interest were also discussed. At the international congress of charities, correction, and philanthropy, a powerful address was delivered by Mrs. Emily E. Williamson, whose theme was "private unofficial supervision of public institutions in coöperation with official boards." On the subject of hospitals in relation to the public health a carefully studied paper was read by John S. Billings, an army surgeon, after which Henry C. Burdette, a specialist in London hospital work, spoke of hospital finances, and Colonel Nalter of the medical staff of the British



MARY LOWE DICKINSON

army, on the applicability of hygiene to the conditions of modern warfare. A speech that called forth much discussion was on pauperism in the light of the theory of natural selection, by D. G. Ritchie of Oxford, England. On municipal reform a stirring dissertation was given by C. H. Parkhurst, whose persistent efforts in this direction have won for him more than a national repute. These, however, are but a few of the subjects presented, their general range being indicated in the remarks above quoted, all the topics mentioned by the chairman, to whom was largely due the success of these congresses, being treated on broad lines, and by men and women well informed on the matters whereof they spoke.

exclaimed, "on this devil, devil, devil business. Drunkenness is a physical defect, and our doctors should be brought to treat it as such." Thus the sessions were continued, the subject being treated in all its aspects by some of the foremost champions of the cause.

In the middle of June were held the congresses relating to moral and social reform, covering a wide range of subjects from philanthropy in its broadest sense to the management of soup houses and newsboys' homes. But as to the scope and purpose of these congresses I cannot do better than quote the words of Mrs. James M. Flower, chairman of committee, by whom in part they were organized. "This department," she says, "includes the public treatment of pauperism; the care of neglected, abandoned,

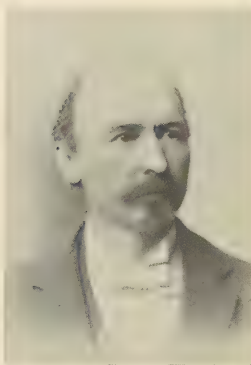


MRS. JAMES M. FLOWER



EMILY E. WILLIAMSON

Next were held the congresses of commerce and finance, including among other subjects, railroads, boards of trade, banking, insurance, and building and loan associations. At the opening session the chairman spoke the usual words of welcome, George R. Blanchard, who responded on behalf of the railroads, reviewing briefly the history of railway transportation from 1828, when on the 4th of July, Charles Carroll of Carrollton, laid the corner stone of the Baltimore and Ohio line, until in 1893 more than 175,000 miles of track connected every portion of the union. On behalf of the board of trade, George F. Stone, its secretary, stated that in 1892 the board had distributed 256,000,000 bushels of grain and 14,000,000 animals on the hoof or as meat products. The cause of building and loan associations was championed by Julius Stern; insurance by John H. Nolan, and mercantile credits by P. R. Earling, who quoted the statement of Webster that credit did a hundred times more to enrich the nations than all the mines in the world.



P. R. EARLING

The meeting of bankers and financiers on the 20th of June was among the most interesting of all the sessions of the Auxiliary; for here was considered one of the leading issues of the day, Horace White of New York speaking of the gold standard and of the silver question as one who had the subject well in hand. It is somewhat remarkable, however, that neither at this nor at any other of the financial congresses was the real aspect of the silver question considered, as related to the appreciation in gold. This is simply that the production of silver in proportion to gold is and long has been in quantity as about 33 to one and in value as more than three to one,



HORACE WHITE

with a coinage for the last twenty years nearly thrice as large as for the twenty years preceding. Silver has declined for the same reason that iron has declined, or that breadstuffs has declined; mainly because the production of silver, as of iron and breadstuffs, is greater than the world requires.

Other addresses were by Lyman J. Gage, chairman of the congresses, Charles Parsons of St Louis, Bradford Ross of New York, and J. J. P. Odell of Chicago. At a session of financiers held on the 22d speeches were delivered by Davis Page of Philadelphia, J. W. Vernon of Providence, R. C. Lake of South Dakota, and J. W. Blake of Texas, Mrs Henrotin speaking on the subject of women investors, and surprising her audience at the financial standing of women as shown by the reports of women presidents and cashiers of banks. On the same day the railroad and insurance men were in convention, W. G. Veazey and John W. Carey representing the former. For the latter Charles E. Kremer read a paper prepared by E. J. H. Woodbury of Boston on electricity as a fire hazard, stating that the danger depended largely on insulation, and whether the electricity were generated in the building or came from a distance. Thomas J. Borden spoke of the method of reducing fire losses, which in the United States average about \$125,000,000 a year. Wooden buildings, he said, could be rendered almost as safe as fire-proof structures; but so far as possible the wood must be placed horizontally, for fire burns faster upward than in any other direction.

Banking, financial, railroad, and insurance congresses were continued on the 23d and following days, the subject of mercantile credits also receiving attention, with P. R. Earling as presiding officer. In his opening address Charles C. Bonney declared that as to the granting of credit the supreme quality to be considered was moral integrity, without which no credit was possible. H. N. Higinbotham stated that credits were too easily obtained, and often as injurious to the receiver as to the giver. Goodman King selected as his topic the mercantile agency system; its origin, usefulness, and suggested improvement; tracing that system from its foundation to its present phenomenal development, a single institution now expending \$3,000,000 a year in



J. J. P. ODELL

procuring information for its patrons. On the books of two such institutions were the names of 1,300,000 firms, the changes often amounting to 3,000 a day. So perfect was their organization that the failures among those reported favorably amounted to less than one per cent a year.

At the congress of building and loan associations, this being not the least interesting among the group, Mrs Mary B. Morrell of Little Rock spoke of woman's place in this relation, claiming that the system was originated by a woman who aided her tenants in laying aside a monthly sum against a time of need. The total investments made by women in building and loan associations amounted to more than the national debt, and women were therefore entitled to a proper representation in the affairs of these institutions. Charles N. Thompson contrasted their benefits to the working classes as



W. H. RHAWN

compared with savings banks, and in another address was explained their economic value to the entire community.

A few days before the close of the Fair the American Bankers' association held its annual convention,





LOOKING EASTWARD FROM CANAL AND BRIDGE

postponed for the first time since its organization in 1875, on account of the severest financial disturbance that had befallen the country for a score of years. The sessions were held in the Art institute, with a muster of about 500 delegates representing every section of the United States, though as yet the panic had barely spent its force and the after effects were severely felt throughout the land. Remedies were suggested by many speakers, of whom some were among the foremost of American financiers. As president of the association, William H. Rhawn stated that during this crisis more than 700 banks, with liabilities exceeding \$180,000,000, were involved in suspension or failure. James H. Eckels, controller of the currency, spoke at length in favor of a bimetallic currency, on behalf of which he advanced some forcible arguments. Allen R. Foote of Washington pleaded for a sound currency and banking system, for which purpose he urged the appointment of a non-political national commission. George A. Butler of New Haven advocated a practical plan of banking and currency, proposing several amendments to the national banking act. The average reserve, he said, wherewith to meet a sudden and unexpected strain, should be at least 25 per cent, with a larger reserve in commercial cities; such reserve should be freely used when necessary and promptly restored as soon as the emergency is past. Other measures were suggested by George S. Coe of New York; by William C. Cornwell, who would permit the issue of notes by properly capitalized and inspected banks, and by Thomas R. Patton, who spoke of the danger of making collections by circuitous routes.

At the following session Joseph C. Hendrix, president of the National Union bank of New York, contrasted the recent panic in Australia with that which had occurred in the United States, remarking that the overwhelming disasters of the former country were largely due to the lack of such financial coöperation as prevailed in the latter. Horace White was in favor of an elastic currency, the prime requisites of which were that no improper limits be placed upon it, and that it be issuable at once as the demand arose. E. O. Leach, a colleague of Hendrix' explained that the financial stringency was by no means due, as was commonly supposed, to an inadequate volume of metallic currency, of which there was more than at any time in the history of the world, the total in November, 1892, amounting to \$7,633,000,000, against \$3,400,000,000 in 1860. Lyman J.

Gage delivered the closing address, after which officers were elected, N. N. White of Cincinnati being chosen president and J. J. P. Odell of Chicago first vice-president.

In connection with the financial congresses was treated in its financial aspect the question of roads, E. H. Thayer of Iowa stating that the most conservative estimate placed the loss to this country, through bad and insufficient roads, at \$250,000,000 a year, approximately divided among the people in proportion to individual expenditure. The remedy, he said in substance, was not a question of increased taxation, but of using to the best advantage the money annually contributed by the people for road purposes. It was within bounds to put the sum spent each year in the maintenance of country roads at \$80,000,000, and as a rule it went each year to keep company with the \$250,000,000 devoured by mud. Except for thinly settled and mountainous regions, every mile of road used by the public and made a thoroughfare by law could be built of stone or gravel, made durable and permanent, and always in condition for the heaviest wagon loads of produce or merchandise. This could be accomplished within a reasonable time and without an additional dollar of taxation; merely through the proper use of the taxes already paid, with the assistance of a little skilful financiering, the borrowing, for instance, of money at low rates of interest, on bonds issued by counties or their subdivisions. Employment would thus be furnished for surplus labor; the money of the people would be kept in circulation, and thrift and prosperity go hand in hand with the prosecution of the work, followed by perpetual benefits to every business interest.



GEORGE F. ROOT

During the term of the Fair Chicago became the centre of musical activity; for here were nearly all the prominent musical associations of the United States, with not a few from foreign lands. At the congresses held the first week in July, and at numerous entertainments given throughout the season, was represented more than a century of musical progress, from the time when Squire Elijah Dunbar led through the intricacies of oratorio chorus the Stoughton Musical society, organized in 1786, their successors still meeting, as did the charter members, for "an annual supper of hot turkey, with nothing stronger than tea or coffee." The Handel and Hayden society of Boston, founded in 1815, sent a portion of its celebrated chorus under the leadership of Carl Zerrahn, while the Chicago orchestra, established in 1891, with Theodore Thomas as conductor, gave expression to the musical taste and talent of the west. At the congresses many branches were illustrated and discussed, from musical literature, art, and criticism, to the management of opera houses, with orchestral art, organ and church music, and choral music and training.

The congresses were opened as usual by C. C. Bonney, E. M. Bowman, president of the American college of musicians, delivering the customary address of welcome, and speaking of the history and aims of the institution. Others spoke in similar vein, suggesting that the college be chartered by congress and thus assume a national character. On the following day the Music Teachers' National association was in session, Bowman as its president, Theodore Presser as its founder, and several others tracing the progress and operations of the society. On the 6th a concert was given, a programme in which were the works of eminent composers being rounded by the contributions of the Thomas orchestra, while on the following day were selections from Glueck's *Orpheus* by Tomlins' chorus of more than 1,000 voices. On the 6th was held a convention of Illinois music teachers, who afterward rendered a symphony of sacred music, followed by a concert representing the works of Illinois composers.

Musical education was freely discussed, George F. Root, a pioneer teacher of music, being chairman of this congress. Many were the remarks as to the power of music as a medium of education and as to its formative influence on character, Jenkin Lloyd Jones speaking in answer to the question, what if music were not in the world; while James R. Murray read a paper on the power and effect of music, in which he took the ground that music neither expressed nor originated anything, but that it called forth the ruling affections. An interesting session was that at which were discussed Indian and folk song in music. The paper read by Alice C. Fletcher of Peabody museum, who for years had been living and studying among the western tribes, was especially instructive, her remarks being practically illustrated by a young Omaha Indian. John C. Fillmore and H. E. Krehbiel expanded on the subject, the latter dwelling on the part which negroes have taken in the folk songs of America. A paper on early phases of American music, by Louis C. Elson of the Boston conservatory, contained several humorous features, his rendition of "Old Hundred," as it was played by the puritans in 1673, causing much merriment. The addresses delivered at this session were interspersed with classical selections rendered by Clara Krause of Berlin and by the Hamburg Buelow orchestra, thus bringing into striking contrast the music of primitive and cultured peoples.

Journalism in relation to music was one of the subjects considered, such points being discussed as the mission of the musical journal and the function of musical criticism in newspapers. Teachers told what they knew of musical instruction in public schools and how to raise the standard of instruction. In the last two days of the congress was considered the condition of musical education in various states and



ELIZABETH C. CARPENTER





NORDICA

countries from the standpoint that music should form a source of mental discipline.

During the musical congresses three special days were set apart for women, Mrs. Elizabeth C. Carpenter, as chairman of one of the conferences, speaking on the subject of women as musical composers. Luisa Coppiani suggested numerous points as to the phonation and guidance of the voice, severely condemning the explosive method of training and recommending that children be taught to sing by note at an early age. Music as a factor in philanthropy was a topic which related to the experiences of Charlotte Mulligan among the working people of Buffalo. The literary portions of the programme were interspersed with vocal and instrumental renditions. On the second of the women's days a paper

was read by Camilla Urso, who urged the employment of women in orchestras as a remedy for careless instrumentation. Lillian Nordica told by proxy what she knew about women on the lyric stage, and Mrs. Theodore Thomas spoke of the influence of amateur clubs on musical taste.

On the 5th of September was held a Welsh festival of song, in connection with the Eistedfodd congress of music, painting, and literature, the proceedings calling to mind the days when Druid priests and bards chanted their prophecies in the forest depths of ancient Britain. Upon the sword in front of the government building

twelve upright stones were erected as altars around a more massive one in the centre, the chief bard proclaiming, as in the days of yore, the Eistedfodd or gathering of bards, and offering a prayer that peace and brotherly love might attend the festival. To this his twelve assistants, representing the months of the year, responded by placing their hands on the sword held aloft by the other. Then from the main altar spoke each bard in turn, and concluding, was robed by the ancient maids of Cambria, the chief in white, the twelve in blue, and all with coronets of oaken leaves. Later there were exercises at Festival hall, the feature of which was the singing of male choirs in competition for prizes. At night a concert was given, at which was rendered for the first time in America the cantata of Prince Llewellyn, a composition dear to the hearts of Welshmen.



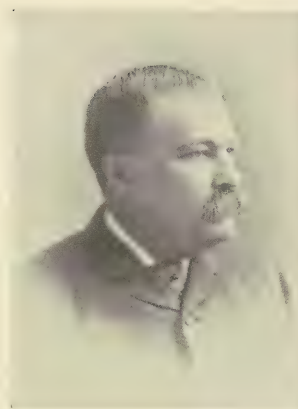
MRS CLARA D. BATES

At the reception which opened the literary congresses a few eminent writers were greeted by hundreds of their readers, the assemblage adjourning later to Columbus hall, where C. C. Bonney delivered the address of welcome, for the nonce in metrical phrase. Charles Dudley Warner responded, and other speakers were Richard Watson Gilder, Max Richter, Kate Field, and Walter Besant, who touched on the work accomplished by the London society of authors, with its membership of 1,000 men and women, remarking also that the time had come when literary congresses should be held at regular intervals, with a view to fostering wholesome literature and satisfying the 120,000,000 readers of English-speaking race.

Copyright was the subject considered at the first session of the authors' congress, George E. Adams, as chairman, choosing for the theme of his opening address future copyright legis-

lation in the United States. He compared the copyright law with the patent law, with which it had much in common, and expressed the hope that a *modus vivendi* would be reached satisfactory to the reading public and to the authors and publishers of Great Britain and the United States. Other addresses and papers were by Sir Henry Bergne, George W. Cable, S. S. Sprigge, Watson Gilder, Hamlin Garland, A. C. McClurg, President Adams of the university of Wisconsin, and Professor Lounsbury of Yale, all agreeing that from the law of copyright should be expunged the clauses relating to simultaneous publication.

At the following session, author and publisher and the British society of authors was the theme of a carefully written paper by Walter Besant. The functions of



W. D. HOWELLS



LEW WALLACE



GEORGE W. CABLE



EDWARD BELLAMY

criticism was the subject of an address by Charles Dudley Warner, who spoke many wholesome truths, though handling somewhat roughly the literature of the United States. An instructive essay on criticism as an educational force was read by Hamilton W. Mable, and other interesting papers were on woman's mission in Italian literature by Madame Salazar; on modern fiction by George W. Cable; on the relations of literature and journalism by H. D. Traill of London; and on the future of the English drama by Henry A. Jones. In



HENRY DRUMMOND

connection with the authors' congress children's literature was discussed in one of the minor halls, Mrs Clara D. Bates presiding, with Eugene Field, Hezekiah Butterworth, Mrs D. Lothrop, and Mrs Peattle among those who spoke or recited.

In the department of history James B. Angell, as presiding officer, delivered an opening address on the inadequate recognition of diplomatists by historians; Mrs Ellen H. Walworth explained the value of national archives to a nation's life and progress; American historical nomenclature was treated by A. S. Spofford, librarian of congress, in a paper read by George E. Adams, and Frederick Bancroft spoke of Seward's policy toward the south. The present status of pre-Columbian discovery was the theme selected by James Phinney Baxter; Prince Henry the navigator by E. G. Bourne; the economic conditions of Spain in the sixteenth century by Bernard Moses; the union of Utrecht by Lucy M. Salmon; the historical significance of the Missouri compromise by James A. Woodburn; these and other subjects and speakers, too numerous here to be mentioned, adding to the interest of the sessions, two of which were specially held by women.

At the congress of librarians Melvil Dewey, president of the American Library association, reviewed the progress of libraries since the first convention of librarians was held in New York in 1852. In an interesting treatise F. M. Crunden sketched the ideal library and librarian, and among other themes were state library commissions and national bibliography. In the department of archæology and philology there were lectures on the social status of women in ancient Egypt; on the romance of archæology; on Schliemann's excavations at Troy; on Vedic studies; on Assyrian tablet libraries, and on "Cyprus, the bible, and Homer," the last by Max Richter, who stated that no country was richer than Cyprus in relics illustrative of the old testament. W. C. Winslow also read a paper on old testament history in the light of modern discoveries, and there were others on linguistic and grammatical subjects.

Folk lore was one of the most interesting of the literary congresses, William I. Knapp of the university of Chicago welcoming the delegates to the third annual session of the International Folk Lore society, while F. S. Bassett, chairman of committee, spoke briefly of this branch of literature. "Unspoken," a paper written by Walter Gregor, a Scotch clergyman, explained how Scotch peasants cured toothache and more serious ailments

by certain rites and incantations, and how to Scotch lasses were revealed the features of their future husbands, with other curious superstitions. In his "Notes on Cinderella," E. S. Hartland stated that there had been several hundred Cinderellas, not a few of whom were of the male sex. Mrs Anna R. Watson discoursed on comparative Afro-American folk lore, repeating some of the quaintest of negro legends, and calling attention to the resemblance between them and those of the Finns and American Indians. The cliff-dwellers was the subject selected by Mrs Palmer Henderson, who claimed that they were of Caucasian and not of Indian race, in some respects well advanced in civilization and



NORWEGIAN COSTUMES

in others strangely primitive, even for a people whose homes were probably built before the erection of the pyramids. A lecture on the myths, symbols, and magic of East Africans by Mrs French-Sheldon was illustrated with





VIEW FROM THE EAST TOWARD THE ART BUILDING

many curiosities collected in the dark continent by this famous explorer, who also displayed the flags which she carried as safeguards through the heart of Africa.

By Vice-president Abercrombie were described the doings of the ancient Finns, their wizards and witches, their gods, their myths, and traditions. Among other papers were those on superstitions of the races of the Northwest by James Deans; on sacred objects of Navajo rites by Washington Matthews; creole folk songs by George W. Cable; the folk lore of the negro by Mrs Anna R. Watson; Voodooism by Miss Mary A. Owen, and Japanese folk lore by W. E. Griffiths. The sign language of the Indians of the plains was described by Lieutenant W. E. Scott, four chieftains seated on the platform answering by signs the questions propounded by the lecturer. Bulgarian wedding ceremonies were illustrated by Wulko I. Shopoff, at whose side were natives attired in wedding costumes.

At the educational congresses, formally opened on the 17th of July, with Bishop Fallows in charge, their sessions continuing until the close of the month, were represented all branches of education and almost every land with an educational

system worthy of the name. Teachers have met in convention almost since the time when our public school departments began to take form and shape; but never before has the subject been treated on such broad lines, including all grades and branches, from the kindergarten to the university, and from business colleges to institutions for the defective classes. Just as the educational display was the crowning feature in the department of Liberal Arts, so were the educational congresses, together with the musical, literary, religious, and other conventions with which they were allied, among the most attractive of the World's Fair parliaments.

After the formal opening in Washington hall, followed by an evening reception, the kindergarten teachers and workers were first in session. W. N. Hallman, who delivered the opening address, selected as his theme the essentials of Froebel's work, whose influence is still more widely felt than that of any other educational reformer. It was the recollection of his own sufferings as a child that made of Froebel the children's apostle, one who had ever their cause at heart and was always at their service. From the day when he entered the village school, of which he was considered the biggest dunce, until he concluded his university career with a brief imprisonment for debt, Friedrich Froebel found nothing in school or college to satisfy what he termed "his inner life." It was in his solitary rambles amid the Thuringian forest that his real education was received. Here he communed alone with nature, learning from the plants and trees the lessons that nature teaches, and here it was that he conceived the great idea of his life. Like Comenius, who lived two centuries before, he looked to nature for the true principles of all education. As he who tills the soil creates nothing in the trees and plants, so, he considered, the teacher creates nothing in his pupils, merely aiding the development of inborn faculties, especially through arousing voluntary activity.



W. T. HARPER

The kindergarten congress was largely in the hands of women; for to women this branch of education is almost entirely relegated. But not alone to this department was woman's participation limited, more than a hundred papers being read during the first week's session of the special congresses by women prominent in the educational circles of Europe and the United States, while at the international congress many of the speakers were of the female sex. Of the general committee Mrs H. M. Wilmarth was chairman; of the kindergarten committee, Mrs E. W. Blatchford; of the congress of higher education, Mrs Harriet C. Brainard, and of that of college fraternities, Miss Ethel Baker. The congress of representative youths, held on the 18th, was intended only for children and those who were to entertain them, Bishop Spaulding, who delivered the principal address, stating that he had many times been asked to speak before the congresses, but had declined all previous invitations, accepting this one because he would rather appear before such an audience than before all the kings and princes



A BY-PATH IN JACKSON PARK





MADONNA

By Gustave Doré



WILLIAM T. HARRIS

Kovalevsky as to what should be added to the usual elementary trial needs of localities or race characteristics. Francis A. Massachusetts institute of technology, reviewed the progress of during the last quarter of a century, stating that there was a who had received a technological training, and dwelling on the in these days of keen competition.

Martin Kellogg of the university of California spoke in course among universities, in place of the present rivalry. They rather than of one type, and each should have a type of its that was attainable on its own proper lines of development, and lence only in certain portions of the wide field of knowledge. discussion among those who would have our universities continue compass, as now they do, their studies covering or pretending entire realm of science and literature. In the department of the following will serve as specimens of the subjects treated and the foremost educators of the day: Should algebra or geometry; should Latin or some modern language come first in the course of secondary schools? Should the amount of time given to languages; should the amount of time given to mathematics be diminished, in order to make room for a more extended course in physics, botany, and chemistry? While these are proper subjects for discussion, they do not strike at the root of the question, which is rather in the method of teaching than in the subjects taught. Latin, modern languages, mathematics, natural science, these and many other branches may be used to good advantage; but less for the slight knowledge actually acquired than as instruments for training the mental faculties. Here is the main purpose of all true education, and while a judicious selection of themes is of course an important factor, it matters far less what is taught than how it is taught. Above all is needed a simplification of text-books, whose rules and definitions should be few and brief; clear but concise in expression, and stripped of all useless verbiage.

Of the congress of business and commercial colleges the main purpose, as stated by the committee, was to explain the evolution, courses of study, methods of training, management, utility, influence, and defects of such institutions. In connection with them was considered the work of schools of stenography and type-writing, and of associations of business educators.

By Earl Barnes of California was read before the psychological section an interesting paper on children's theology, containing the results of actual inquiries among thousands of children from six to fifteen years of age. Most of the answers represented God

in the world. At the sessions of educators for the blind W. H. Millburn, "the blind chaplain of congress," was the presiding officer, speaking in mellow and resonant voice, with slow deep utterance and in well chosen phrase.

The sessions of the international congresses, attended by delegates from many countries, were held under the auspices of the American National Educational association, of which William T. Harris is president. Numerous were the questions handled simultaneously in the halls of the Art institute; the programme for the 26th of July, for instance, including university, college, academy, seminary, common school, and kindergarten topics, while on the following day were treated, in addition to some of these, musical, technological, industrial, manual, and business training, with physical education and rational and experimental psychology. John Eaton, formerly United States minister of education, stated that while 100,000,000 pupils were receiving rudimentary instruction in all the countries of the world, more than twice that number had no instruction of any kind. A paper was read by the Russian professor Ergraff

course to meet the industrial Walker, president of the technological instruction great demand for students importance of such training

favor of a comity of interest should be of one spirit own, aiming at the highest striving after special excellence. This paper aroused much to box the educational to cover almost the secondary instruction discussed by some of



PORCELAIN VASE. BERLIN



as a good and great man, with little reference to sterner qualities. Many of the conceptions were vague and shadowy, and some were positively ludicrous. "He can stand on the ground and reach the sky with his hands," said one. "He can look through a key-hole" said another. Heaven was described as a city, a palace, or a park; its location just above the earth, though some placed it in one of the stars, and a few on earth itself. "Whether they go to school there," answered a little girl, "I do not know; but I think they must; for they are so patient and good." Occupation in heaven was a subject that troubled the little ones, not a few of whom spoke of the monotony of celestial life. "I should like to visit heaven," remarked a boy of twelve, "but only for a short time." Angels were described as women, fairies, or birds; but never as men. The devil and his abode were represented in the usual fashion; but these were not often mentioned, and only by children under ten years of age; the orthodox Satan, with his realm of brimstone and fire, being discredited by those in whom the rational faculty was in a measure developed.



OCTAVE CHANUTE

Before the project for a Congress Auxiliary began to take definite shape, a meeting was held of some of the most prominent of American engineers with a view to holding special congresses in connection with their profession. It was then determined to form an association of the various engineering organizations in the United States and Canada, and to extend invitations to leading members of the profession in every quarter of the world. Funds were liberally provided, among other purposes for the entertainment of visitors, and soon it became apparent that here would be one of the principal features of the Auxiliary. It was at first intended to make of these congresses a subdivision of some department of science; but at a meeting of delegates held in May, 1891, it was resolved "that the importance of engineering entitles it to the place of an independent department in the World's Congresses." The resolution was approved by the authorities; circulars were issued, and a programme prepared including the divisions of civil, mechanical, mining, metallurgical, military, and marine engineering, with engineering considered as a branch of education and as a profession. On these subjects were read some 220 papers in all, many of them being followed by discussions.

At the opening session in Washington hall, Charles C. Bonney and Octave Chanute, the latter as chairman of the meeting and president of the general committee, discoursed on the dignity and utility of the profession. Sir Benjamin Baker, as vice-president of the British institution of civil engineers; Baron de Rochemont for France; Alfred Nyberg for Russia; C. O. Gleim for Germany; Hugo Koestler for Austria, and Celso Capacci for Italy, all spoke of the interest manifested in these congresses, as a part of the great series planned for the interchange of thought among the foremost thinkers of the world.

As with other departments, the sessions of the various divisions were held in separate halls; but of the many topics considered only a brief synopsis can here be given. At the mechanical congresses, with Eckley B. Coxe as president, was recommended the adoption of an international system of testing materials, and this was followed by a discussion of the various methods of testing locomotives, while at other times were debated their limitations as to speed. Among other subjects treated were oil-line pumping engines, evaporative surface condensers, water meters, calorimeters, and ammonia motors.

In the division of civil engineering, of which William Metcalf was presiding officer, the navigation system of France was explained by F. Guillaing, inspector-general of roadways and bridges; F. A. Pimental, a civil engineer of Portugal spoke of the road, river, and railway communications in his country, and a councillor on buildings to the Prussian government illustrated the plan of the railway terminal at Altona, whereby through a system of over and under grade structures, all surface crossings were avoided. At another session E. A. Kempus and C. A. Huet discussed the improvement of the North sea canal in Holland, the Lower Weser and its improvements being described by German experts. As an instance of the cosmopolitan character of these gatherings it may be stated that on one occasion papers were read in person or by proxy from citizens of New York and Chicago, of Germany, France, Great Britain, Portugal, Mexico, Chile, and New South Wales, the topics varying from railroads to the uses of Portland cement.

At the joint sessions of mining and metallurgical engineers, of which Henry M. Howe was president, a Washington statistician, in an exhaustive paper on the geological distribution of metals, showed that between 1792 and 1890 the United States had produced nearly one third of the world's supply of gold and more than one fifth of its silver, the proportion having largely increased within the last score of years. The lead region of southwestern Wisconsin, the lead and zinc deposits of the Mississippi valley, and the Bertha zinc mine of Virginia were also among the subjects discussed. G. Chesneau of Paris spoke of the ventilation and safety of mines, and the detection and measurement of fire damp. The leading part which electricity was destined to play in mining was food for much speculation based on the inventions of recent years. Improvements in the handling and reduction of ores were considered, and an entire session was occupied in discussing the different methods of manufacturing steel. Richard Akerman described the Bessemer process as conducted in Sweden, and H. H. Campbell



COLONEL H. L. ABBOTT



ROBERT H. THURSTON

considered the open-hearth process in a paper which was both practical and scholarly.

In the departments of military and naval engineering, with Clifton Comly and George W. Melville as presidents, the entire subject of coast defense was reviewed, and especially were considered the merits and demerits of the systems adopted by the United States and Great Britain. Colonel H. L. Abbott of the United States army was of opinion that on account of the facility with which troops could be concentrated by rail upon any given point, there was little danger of invasion. Our greatest need was to prepare against naval attacks, and to that end it was necessary to protect our cities from distant bombardment from the ocean; to bar the passage of fleets through narrow channels leading to strategic points, and to close wider entrances leading to important land-locked bays or sounds. Major G. S. Clarke discussed the matter from the British point of view, stating that since the United States navy could not obtain control of distant seas, except in alliance with some European power, it should be held available for home defense. The natural policy would be to trust to the navy for the protection of the coasts and to provide fixed defenses only for the rendezvous

and depots of its fleets.

At one of the sessions were discussed the modern infantry rifle and the wounds which it inflicted, comparisons being made between recent and old-fashioned weapons. Captain Blunt of the ordnance department traced the gradual decrease in the weight of the bullet, the size of the charge, and the diameter of the calibre, arguing that the magazine gun gives to the soldier a reserved power while in action, and thus increases his confidence. The new projectile, as discharged from the modern rifle with a velocity of 2,000 feet a second, would penetrate the earth to a depth of 25 inches; would pass through pine wood 30 inches, and would kill or wound four men standing in file. Surgeon La Garde illustrated his remarks with anatomical specimens, showing that the old style of leaden bullet shattered all portions of the bone, while the modern steel missile penetrated without fracturing. Hence the use of the new rifle and bullet was not only more effective but more humane.



LOOKING NORTH FROM ADMINISTRATION BUILDING





THE SHEPHERD BOY

By Thorvaldsen

The sessions on engineering as a branch of education, with I. O. Baker as chairman, were attended by students and professors from prominent institutions in Europe and the United States. John Goodman of the Yorkshire college, England, Charles D. Jameson of the university of Iowa, and others spoke on the subject of laboratories and the researches conducted by students. Field equipment and practice, methods of training, and similar topics were also treated in this connection.

In addition to the sessions already mentioned, a conference was held on the subject of aerial navigation, O. Chanute, Doctor Thurston, and Colonel King presiding at the several meetings. Papers were read and the views of distinguished scientists considered, general principles being mainly discussed and special devices of no practical value excluded from consideration. It was shown that aerial navigation could now be classed among the sciences, and that such was the progress within recent years that most of the problems connected therewith would appear to be on the point of solution. Since the last international conference, held in Paris in 1889, a measurable success has been achieved in driving balloons at the rate of 25 miles an hour; but at such cost and with loads so light as to limit their use to war purposes. It was believed, however, that a speed of 60 to 80 miles would eventually be attained with flying machines propelled, like birds, by self-developed energy.

Still another congress was that which was held for suggesting improvements in the great waterways of the world. A prominent engineer explained the project for the Nicaragua canal, describing the route from ocean to ocean as indicated in the relief map in the Transportation building. The principal topic, however, was the proposed ship canal between Lake Michigan and the Mississippi river, connecting the commerce

of the Gulf of Mexico with that of the great lakes and internal waterways. The route by way of the head of Lake Superior was considered by the secretary of the Duluth board of trade, and that by way of Chicago and the Illinois river by L. E. Cooley, a Chicago engineer. Perhaps the most forcible presentation of the matter was by an Iowa delegate who said in part: "The building of this waterway means higher prices for grain and produce to the farmer by making freight cheaper. This canal will carry wheat from the Mississippi river to Chicago for two cents per bushel, saving four cents per bushel. Suppose it carries 400,000,000 bushels of grain, or one third of the crop of 1,200,000,000 bushels produced in the six states of Iowa, Illinois, Minnesota, Wisconsin, Kansas, and Nebraska, the farmers will be benefited by this route to the extent of \$16,000,000 on this item alone, and on the 800,000 tons of anthracite coal used in

this valley will at least be saved \$2 per ton on the through route from Buffalo, which would amount to \$1,600,000 more."

At the closing session all the members of the various divisions met together, and the chairman of each reported briefly the proceedings in his section. Earnest and telling farewell speeches were delivered by many of the leading foreign delegates, and when the meeting separated, it was felt that at these congresses the work accomplished tended to the advancement of all branches of engineering science.

At the opening session of the congresses of art and architecture, with Charles L. Hutchinson as chairman of the former, Walter C. Larned delivered an address on the relation of literature to art, and among other papers were those on American painting and sculpture by W. M. R.



GROUP FOR ELECTRICITY BUILDING



GROUP FOR ADMINISTRATION BUILDING



GROUP FOR ADMINISTRATION BUILDING





W. M. R. FRENCH

French, and on Polish art by Michel de Zmigrodski. The congress of photography held several sessions, as also did the congress of ceramic art, women being largely represented in the sessions of the latter and reading essays in each of the several departments.

The congress of architecture dealt largely with the architectural, landscape, and other constructive features of the Fair, among the speakers being D. H. Burnham, F. L. Olmsted, E. C. Shankland, W. H. Holcomb, C. F. Foster, and R. H. Pierce; but of these matters sufficient mention has already been made. An interesting paper by Henry Van Brunt, the artificer of the Electricity building, touched on the growth of characteristic architectural style in the United States. Frederick Baumann chose for his theme "Chicago; a sketch of its rise and development," describing some of the old-time buildings and tracing the development of architectural science since, in 1846, John Van Osdel, the pioneer of his profession, first devoted himself to the

making of plans and specifications. The elevators of Chicago were marvels of constructive skill, and as for the raising of buildings and blocks, it would seem that the men of Chicago could raise any structures on earth, unless it might be for the pyramids of Egypt. Other themes discussed were the use of color in architecture by H. L. Warren of Boston; government architecture by Jeremiah O'Rourke, and public competition by J. Gaudet, while as president of the American institute of architects, which held here its annual convention, E. H. Kendall delivered the usual address.

In the congresses at which were discussed the various branches of government, many subjects were treated of vital importance to this over-governed country, where what is needed above all else is to undo the mischievous legislation which impairs the prosperity of state and nation, of community and individual. As proposed by the committee the topics to be considered included law reform, international law, the administration of justice, political and economic reform, the government of cities, executive administration, the protection of property in literature, and arbitration and peace.

At the sessions devoted to law reform and jurisprudence were discussed the development of constitutional law in the United States; claims against governments; the administration of civil justice in Russia and in Japan; the criminal law of Italy; legal education, and admission to the bar. Judge Gary chose for his theme the value of precedents, and Judge Hudson asked and in part answered the question, how could the administration of justice be improved; other speakers on this topic being judges Wakefield, Vance, and Hawkins. Simeon E. Baldwin spoke of the duty of the state in suits attacking charitable bequests, and J. B. Haskell of the conflict of state and federal court decisions. These, however, are but specimens of the numerous subjects presented for consideration.

The suffrage was fully treated, and especially the question of woman's suffrage, the speakers on the latter subject including, in addition to such prominent advocates as Susan B. Anthony, Isabella B. Hooker, and Laura de Force Gordon, women from many foreign lands, from Iceland to South Australia. Proportional representation was freely discussed



F. W. GROGAN

and recommended; some of the speakers urging that each political element should be represented in the ratio of numbers. Municipal government was a favorite topic, and at the congresses held thereon some forcible views and statements were presented. David Dudley Field recommended a reduction in the number of municipal officers to be elected by popular suffrage; so that voters would not need to consider the claims of a host of candidates, as to whose fitness or unfitness they could not possibly be informed. Seth Low declared the most deep-seated cause of municipal evils and troubles to be the disposition to use a city for political purposes without consideration for the city itself. Men became partisans before they were citizens, and to secure office, city officials must first be partisans. Charles S. Ashley called attention to the general condition of cities and towns—bad paving, defective sewerage, dirty streets and alleys, inferior gas, mismanagement of schools, and extravagance in all departments. As a remedy he suggested the appointment of committees of property owners to coöperate with officials or agents in making public improvements. Among other speakers were John H. Gray and W. J. Onahan, whose remarks dealt mainly with



RICHARD M. HUNT

the municipal affairs of Chicago.

Present at the international congress of arbitration and peace were prominent advocates of the cause from many cities and nations. From Washington came Josiah Quincy, assistant secretary of state; from Boston, Hezekiah Butterworth and Robert T. Paine; from Philadelphia, Alfred H. Love; from London, W. Evans Darby; from Germany, Adolph Richter; from Italy, V. Zeggio and Hector Pratuzzi; while Denmark, Turkey, Africa, and other lands had also their representatives. As president of the congress, Josiah Quincy read an exhaustive paper on the financial aspect of the question, and on the benefits of arbitration in the settlement of international disputes. In the United States there was one soldier to every 2,640 citizens; while in France the proportion was one in 68, and in Germany one in 90. Within the last quarter of a century the United States had several times adjusted by arbitration the differences between other powers; within the last century

this country had in more than thirty instances arranged for the settlement of her own disputes with foreign powers through some form of arbitration. To these must be added the settlement of the Bering sea controversy, the most conspicuous example of all, and one that had greatly strengthened the cause by attracting public attention, by the novelty and importance of the questions involved, and by the tone and character of the proceedings.

Alfred H. Love declared that there could be no enduring peace while nations continued to put their trust in weapons; preaching peace in their churches while organizing armies and navies, and spending their substance on fortifications and battle-ships. The appropriations made for such purposes should be used for hospitals and merchant-men; should form an international relief fund for the aid of mankind, irrespective of nationality, wherever there be loss, distress, and suffering. Thus would be formed the grandest pension fund that the world had ever known. In these remarks is indicated the drift of thought in a general discussion on the fraternal



SOUTH FRONT OF ELECTRICITY BUILDING

union of peoples. By George D. Boardman was read a paper on the proper relation of nationality to internationalism, and by Hodgson Pratt was prepared one on international animosities and how they may be removed. John W. Hoyt delivered a vigorous address; Henry S. Clubb spoke on prophecies of peace and war, and Philip S. Moxom on the moral and social aspects of warfare, which he denounced as murder, robbery, and arson on a gigantic scale.

Next in the series of congresses were such as could not properly be classed in any of the principal departments, or for special reasons could not be held at the appointed time and place. Among them were the dental, pharmaceutical, and horticultural congresses, and that which dealt with the African people and continent. The sessions of the last named were of unusual interest, its deliberations including scientific, literary, social, industrial, and commercial questions, discussed by many speakers and in many phases. The Belgian minister delivered the opening address, showing how in the young state of Congo liberty and civilization had supplanted slavery and barbarism; how traffic in arms and rum had been suppressed, and how Arab slave-dealers were held aloof by a chain of defensive outposts. One of the best speeches was from Prince Massagnoï, a native of Africa and a graduate of an American college. From Eli Sowerbutts, a member of the Manchester Geographical society, was read a paper on Africa as a whole, with colored maps displaying the inhabited





THE DIANA CLOCK

portions and the prevailing religions and governments. Frederick S. Arnot explained what the Africans themselves have done to develop Africa, and C. C. Adams spoke of that country as a new factor in civilization, touching on its resources, climatic conditions, and railroad development. Others dealt with the African negro as a manufacturer, tradesman, physician, and his Americanized brother as a mechanic, artist, musician, journalist, and professional man, still others telling what the American negro owed to his kindred beyond the sea. Should the Afro-American colonize Africa, was among the topics considered, one of the speakers suggesting the formation of a chartered company, like that under which Virginia was colonized; but to this the sentiment of the congress was strongly opposed; for, as was stated, civilized negroes of the better class were needed where they were, to counteract the effect of poverty and illiteracy among others of their race.



ELISHA GRAY

The action of European powers in relation to the slave trade was freely discussed, and especially the effect of the Brussels treaty of 1891, reports being received from various anti-slavery societies and from the director-general of the Congo free state, touching on many of the subjects under consideration by the congress. One of the first addresses delivered was on the condition of the negro from 1493 to 1893, and by others were treated from historical, philosophical, and ethnological points of view, the African civilizations of the past and present, with special regard to that of Egypt. But the main interest centred on the slave trade, the efforts to suppress it, and the means for affording the colored races opportunities for self-improvement and self-advancement. In this connection one of the most telling speeches was by Bishop Arnett, at the celebration in Columbus hall of the 31st anniversary of Lincoln's proclamation.

In the department of science and philosophy were included nearly all the branches that could properly be classed under those divisions, the sessions lasting throughout the week beginning with the 21st of August, though for reasons that need not be stated, some were held earlier or later during the season of the Fair. At the formal opening, among those who accompanied president Bonney to the platform was Baron von Helmholtz, whose appearance was greeted with an outburst of applause such as never before was heard within the walls of the Chicago Art institute. There were the usual addresses from the chairmen of the several congresses, among them one from Elisha Gray, who presided over the electrical congress, and for many years has been striving to bring about an international agreement as to electrical units and standards of measurement. To this end eminent men were appointed as delegates by the governments of Europe and the United States, to continue the work already accomplished, the Austrian delegation being headed by Nikola Tesla, who as an electrician ranks second only to Edison, while Canada, Mexico, and China were also represented. Thus the decisions reached and embodied in the report adopted at the close of the congress were in the nature of a recommendation to the participating powers, and in the light of present knowledge may almost be considered as final.

First among the papers read may be mentioned that of Nikola Tesla, who selected as his theme mechanical and electrical oscillators, handling the subject with his usual skill and illustrating it by a number of startling experiments. W. H. Preece, an English inventor and author of note, considered the problem of electrical communication through space. After referring to Edison's experiments, showing that telegraphic communication could be transmitted to or from a moving train, he stated the results of his own researches as to the laws and conditions that determine the limits of distance between transmitting and receiving agencies. Silvanus P. Thompson, one of the most popular writers on this branch of science, suggested the means for establishing ocean telephony, claiming that long-distance telephoning, to the point of freely conversing across the Atlantic, was but a question of time. By George Forbes was explained the work now in progress for utilizing the Niagara falls in the generation and transmission of electricity, the aim being to supply power for factories within a radius of 200 or 300 miles, and perhaps for propelling boats on the Erie and other canals.

Before the congress of chemists many interesting papers were read; among them that of John W. Langley on the works and aims of the committee on international standards as to the composition of steel. H. D. Richmond spoke of the analysis of dairy products; Ernest Millau of the best methods of oil analysis, and at other sessions agricultural chemistry was thoroughly discussed, especially in relation to soils and the analysis of fertilizers.



GENERAL GREELEY



NIKOLA TESLA



A. G. BELL



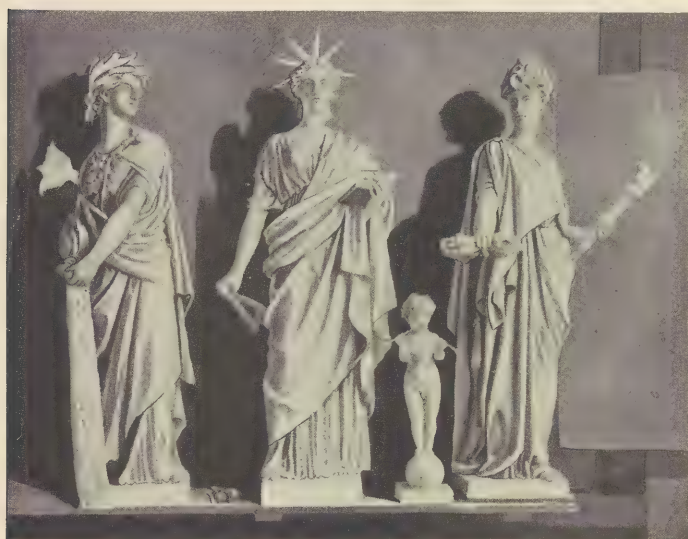
Not a few of the speakers were from Europe and Australasia, a Russian professor from the Polytechnic school of Riga presiding at one of the sessions. In connection with the chemical division was held the congress of pharmacists, at which the education and examination of students in schools of pharmacy were the principal subjects of discussion. At a special session held by women, the chairman, Mrs Ida Hall Robey, stated that there were more than 700 registered pharmacists of the female sex in the United States. In the geological division women also met in separate convention, among the subjects treated being the granites of New England and the fossils of the upper Silurian group. By James Geike, of the Scotch geological survey, a valuable paper was prepared on the glacial succession of the British isles and northern Europe. Glacial succession in Sweden, in Switzerland, and in the United States were also treated by eminent geologists, and other questions considered were pleistocene climatic changes and the correlation of glacial formations in opposite hemispheres.

Meteorological topics were discussed by delegates from many states, and especially by the chiefs of weather bureaus, the principal subjects considered being the proper location, elevation, and shelter of instruments. In an interesting paper Frank H. Bigelow discoursed on the possibility of long distance forecasts, stating that after a thorough investigation he had obtained results which clearly indicated that the magnetic influence of the sun upon the earth is attended with well defined effects on its atmosphere. John Eliot of Calcutta took for his

subject the prediction of dry and rainy seasons, and Father Faura, director of the observatory at Manila, the signs which precede typhoons in the Philippine islands.

In the astronomical department Alvan G. Clark, by whom were fashioned the lenses for the Lick and Yerkes equatorials, spoke of the future mechanism of telescopes, claiming that the limit of size and power was yet far from being attained. T. J. J. See touched on the investigation of double-star orbits. In a darkened room George E. Hale described and illustrated with stereopticon views the process of taking photographs of the sun, and by J. Keeler were traced the wave lengths of the principal lines in the spectrum of the nebulae.

At another session Egon von Oppelzer read a paper on contributions to solar physics, and W. H. Pickering attacked the theory that the moon was a dead planet, asserting that there were evidences of the existence of water and atmosphere. In this connection may also



WATER, SCIENCE, AND FIRE

be mentioned the mathematical section for the discussion of mathematics in relation to astronomy.

At the philosophical congress, held in connection with those which dealt with physics, R. N. Foster, chairman of committee, remarked that philosophy, as compared with the solid work of science, was like a comet sailing among the stars, very large of head and seemingly dangerous, but after all nothing more than vapor. Nevertheless philosophy was the mother of all the sciences, taking up their many threads and presenting them in their essential unity. Moreover it pervaded the entire domain of education; and education, not money, was what made the man. A paper on the Hegelian system of dealing with criminals called forth much discussion, one of the speakers touching on the methods advocated by Herbert Spencer and Leslie Stephen, who were in favor of reformatory rather than vindictive punishment. Among other subjects considered were the ethical aspects of pessimism; the twofold nature of knowledge, imitative and reflective; the philosophy of education, and synthetic education, Josiah Royce of Harvard university reading the final paper on Kant and causation, prepared by W. T. Harris of Washington.

In the congress of psychology were treated mesmerism, hypnotism, clairvoyance, and kindred topics, Elliott Coues, as chairman, reviewing in his inaugural address the entire field of psychological science, past, present, and future. "While not as yet what may be termed an orthodox science," he said, "the facts on which it is based have always existed, and this is the first time that it has received official recognition from government." Many who have long been students of the strange phenomena connected therewith read papers tending to correct the crude ideas commonly entertained on this subject. A few days later were held the congresses on anthropology, ethnology, and zoology, W. F. Putnam, as chief of the Anthropological department of the Fair, taking a prominent part in the proceedings.

Labor was the next subject for consideration; not the labor question as it is commonly understood, but labor in its highest and broadest sense, as discussed, though with much diversity of view, by its sincerest friends and champions in the United States and in many foreign lands. From England especially came many leaders of the cause, and among those who coöperated with the committee, personally or as corresponding members, were William E. Gladstone, Sir John Gorst, home secretary for India, Richard T. Ely, and Carroll D. Wright.

Cardinal Manning accepted an honorary membership, and said Cardinal Gibbons: "I regard the congresses as the most important feature of the Exposition, and the labor congress as the most important of the congresses."

In his opening address C. C. Bonney spoke of the problems which the labor movement presented. Others followed in similar vein, among them Bishop Fallows, who touched on the attitude of the church as a friend to the laboring man. By Herbert Barrows was presented a message of greeting and sympathy from the workingmen of England, supplemented by a few remarks of his own. Kate Field was in favor of a department of labor in the cabinet, and of a practical labor bureau, with affiliated societies in every section of the United States. In a paper prepared by Lady Dilke was told a pitiful story of the hardships of British workwomen, of those who toiled in the foul atmosphere of sweat-shops and factories for less than would furnish the scantiest of daily bread; makers of match-boxes, for instance, receiving but seven shillings for 84 hours of labor. Among the speakers at the opening session were John H. Gray of the Northwestern university; William Clarke, secretary of the British advisory council; Doctor Zacher of Berlin, and Victor Delahaye of the superior council of labor of France.



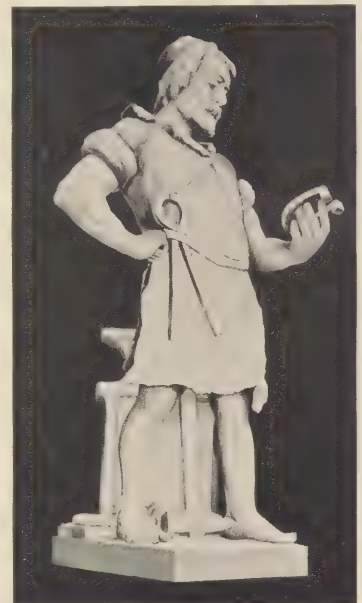
EDWARD EVERETT HALE

At another session Samuel Gompers, in answer to the self-proposed question, "What does labor want?" said that it wanted the earth and the fulness thereof; and first of all an immediate advance in wages and reduction in time—eight hours a day, with fewer to-morrow and fewer still the next day. But while there was other nonsense of this kind, the discussions of the labor parliament were for the most part of a rational and instructive character, as at times were even the remarks of Samuel Gompers. Edward McGlynn discoursed on the destiny of the labor movement, advocating the single tax doctrine as one that would improve the laborer's condition. On the latter question spoke also Henry George, who explained the meaning of the phrase and how the idea was suggested to him by the so-called land boom in California, which carried the price of what before were almost worthless tracts to \$1,000 an acre. General Weaver, Mary E. Lease, and others stated their views in this connection, and a single tax platform was adopted, the final clause in which, recommending public control of common ways, as for transportation and the furnishing of gas and water, was amended on the motion of Hamlin Garland.

From Edward Everett Hale was read an essay on the results of coöperation and the sharing of profits as exemplified by the Nelson Manufacturing company of St Louis, and by N. O. Nelson, vice-president of that company, were further explained its workings. The latter was one of the best papers read, full of sound, common-sense, practical suggestions, and without trace of communism, anarchy, or socialistic drivel. Said Nicholas P. Gilman, who followed, "To give a workman equal opportunity with his employer is the philosophy of the whole labor question, and an example like this is worth all the rhetoric in the world." The education of the workman and especially his industrial training, was considered, as also was the question of weights, measures, and coinage, one of the speakers advocating international mints and an international system of weights and measures. At a separate session of women Lucy Salmon of Vassar college discoursed on economic questions in domestic service, and Mrs Helen Campbell on the industrial condition of women and children. A sensible paper was the one read by Catherine Coman of Wellesley college, showing that not only were women's wages steadily advancing, but during the present century the occupations open to women had increased a hundred fold.

The labor congresses closed on labor day, the 4th of September, on the Sabbath preceding which, clergymen representing several denominations met in Washington hall before an audience of 2,500 persons, assembled to hear from the churches their messages of hope and cheer. After a brief address from Henry D. Lloyd, who acted as chairman, Archbishop Ireland spoke on the Catholic church and the labor question, touching at length on the encyclical relating to the condition of labor from Leo XIII. Speaking for the Protestant denominations, John P. Coyle stated that the church owed a duty to labor, and if that duty were done the labor problem would not exist. Representing the Hebrew faith, Emil G. Hirsch remarked that there was no Jewish pulpit but felt the thrill of the prophet's words, that he who planted the vine should eat of the fruits thereof. The age to preach the resignation of the weak was past. The law was often made a fetich, and charity a makeshift. Had we more justice, we should not need charity. In a paper written by George E. M. McNeill was recommended an increased tax on land to give work to the unemployed, and Herbert Burrows outlined the attitude of socialism toward labor and the church.

Of all the sessions held in the Art institute none attracted more attention than those of the so-called parliament of religions, preceded by the catholic congress and followed by denominational and missionary congresses, with those of the evangelical alliance and other associations and brotherhoods.



THE BLACKSMITH

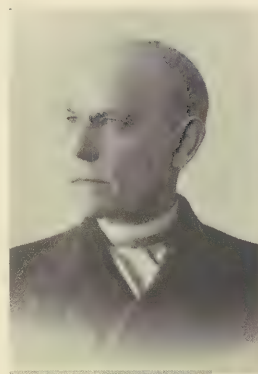




CARDINAL GIBBONS

Here were represented all christian sects and creeds, the Hebrews also participating, while from Hindostan and China came men who explained how much there was in common between the doctrines of Christianity and those of Brahminism, Buddhism, and Confucianism. Points of agreement and divergence in belief were discussed, with the achievements of churches and missions in the common cause of humanity, these gatherings receiving the endorsement of the religious leaders of the world, not a few of whom were present in person.

On the morning of the 4th of September the hall of Columbus was crowded as never before it had been; for this was the day appointed for the opening of the catholic congress. The hall was tastefully decorated, a fringe of plants encircling the carpeted platform,



ARCHBISHOP FEEHAN

with a large bouquet of roses on the desk, and in the background festoons of white and yellow bunting. On the right was a bust of Cardinal Manning; on the left one of Cardinal Newman, and smiling as in benediction on the audience, the portrait of Leo XIII, beneath it those of Washington and Columbus, below which was the papal banner. At the head of the procession was escorted to the platform a gray-haired man, benign of aspect and attired in robes of scarlet. It was Cardinal Gibbons of Baltimore, to whom was accorded the place of honor. Next to him were archbishops Feehan, Ryan, Ireland, Hennessey, Jannsens, and other dignitaries of the church, with a number of priests and laymen. By Archbishop Ireland were briefly outlined the purposes of the congress; Cardinal Gibbons urged that all discussions be conducted in a spirit of mutual forbearance, and Archbishop Redwood of New Zealand said that he had travelled 9,000 miles to go to school again at the greatest school on earth—the congresses of the Auxiliary. By William J. Onahan, secretary of the committee on organization, was read a letter of greeting and approval from the pope and by Father Nugent a similar epistle from Archbishop Vaughan, successor to Cardinal Manning. Monseigneur Satolli delivered an eloquent address in Latin, and after further speeches the first regular session was convened.

To relate in detail the proceedings of the catholic or other religious congresses is foreign to the purpose of my work, not only on account of their length, but because in these pages is no place for theologic or polemical discussion. Moreover, to the members of each denomination its tenets are already known, and here to repeat



NORTHWEST ELEVATION MANUFACTURES BUILDING

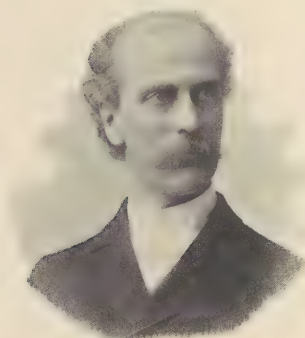


DOMES OF HORTICULTURAL BUILDING FROM WOODED ISLAND



them would be a tiresome iteration. Suffice it to mention in briefest outline the more salient features, not omitting the views expressed by those to whose creeds the Christian world is a stranger.

Passing then to the parliament of religions, it may first of all be stated that while doubtless the only one at which all the great historic faiths were represented, there is nothing new in its plan; for the project for a congress of representatives of religious faiths is older than Christianity itself. Says John H. Barrows, chairman of the committee, "H. Dharmapala of Calcutta, who was to speak for the Buddhist church of Ceylon, thus wrote as to the religious parliament: 'Two thousand years ago, just such a congress was held in India by the great Buddhist emperor, Asoka, at the modern city of Patua, and the noblest lessons of tolerance therein enunciated were embodied in lithic records and implanted in the four corners of his empire. Here is one extract: King Plyadasi honors all forms of religious faith, and enjoins not only reverence for one's own faith, but no reviling or injury to that of others. Let the reverence be shown in such manner as is suited to the difference in belief.'"



JOHN H. BARROWS

The idea of a congress of religions, or what has been termed a sympathy of religions, has been many a time suggested both in poetry and prose, from the days of Cominius to those of Tennyson, who quotes the following inscription for a temple in Kashmir: "O God, in every temple I see people that see thee, and in every language I hear spoken, people praise thee." And thus in his *Akbar's Dream*, one of the most recent of his poems.

I dreamed  
That stone by stone I reared a sacred fane,  
A temple, neither pagod, mosque, nor church,  
But loftier, simpler, always open-doored  
To every breath from heaven; and Truth and Peace  
And Love and Justice came and dwelt therein.

By some of the foremost thinkers of the world, both among clergy and laity, the project was strongly commended, and if here and there it was condemned, this was only among the prejudiced and narrow-minded. "Religion cannot be exhibited," wrote an English clergyman. "But surely," as Doctor Barrows remarks, "its great part in human history can be impressively told; its achievements can be narrated; its vast influence over art, ethics, education, liberty can be set forth; its present condition can be indicated; its missionary activities can be described, and best of all the spirit of mutual love, of cosmopolitan fraternity can be disclosed and augmented." By the various denominations, about thirty in number, were expounded what they deemed to be the special truths committed to them, the practical results accomplished, and especially such as shed lustre on their annals.



JOSEPH COOK

It was an impressive spectacle that marked the opening of the parliaments in Columbus hall, on the 11th of September, and never before perhaps was seen at one time and place such diversity of feature and costume. Men from almost every state and European nation were here; here were Hindoos in their gaudy robes; Japanese in their picturesque garb, and Chinamen in mandarins' attire. When the procession approached the platform, headed by C. C. Bonney and Cardinal Gibbons, there was neither vacant seat nor standing room on floor or gallery. Then came a long array of bishops and archbishops, of priests and princes, of men and women of every race and color, such as Addison might have dreamed of in his vision of Mirza. After prayer and hymn, President Bonney briefly outlined the programme, and was followed by Doctor Barrows with an address of welcome. Then spoke Archbishop Feehan, Cardinal Gibbons, Augusta Chapin, Harlow N. Higinbotham, Alexander McKenzie, Archbishop Dionysios Latas, head of the Greek church, P. C. Mozoomdar on behalf of the Brahminists, and Pung Kuang Yu for the followers of Confucius.

Among the speakers at other sessions were Lyman Abbott, whose subject was "religion essentially characteristic of humanity;" E. L. Rexford, whose theme was "the religious intent;" Edward Everett Hale, who was received with much enthusiasm, and Joseph Cook, who declared that he had no sympathy with the milk and water, lavender styles of modern religion. Rabbi Mendes spoke in relation to the Hebrew faith; H. Toki explained the tenets of Buddhism; Kinza Riuge M. Hirai those of the Japanese,



ARCHBISHOP DIONYSIOS LATAS



THOMAS W. HIGGINSON

and Shibata Reuchi those of the Jikko sect of the ancient Shintoo faith. Shibata, attired in robes of white and yellow silk, created somewhat of a sensation by kissing on the cheek several motherly dames who wished to shake hands with and congratulate him, but this was merely the Jikko method of salutation and was so accepted.

By Archbishop Kane was read a paper from Cardinal Gibbons on the needs of humanity supplied by the catholic religion. Mrs Eliza Sunderland spoke of comparative religions, and from T. B. Thiele of Leyden university came a treatise on comparative theology. Thomas W. Higginson, in an essay on the sympathy of



ANNIE BESANT

the religions, stated that the first religious parliament in the United States was simultaneous with the nation's birth; George Washburn, president of a college at Constantinople, presented an exhaustive treatise on the points of contact and contrast between Christianity and Mohammedanism, and Mrs Ormiston-Chant spoke in favor of a new religion. From Kung Ho of Shanghai was read his prize essay on Confucianism, and from Monseigneur D'Harlez of Louvain university, a paper on the comparative studies of the world's religions. Royalty was also represented at the parliament, Prince Wolkonsky of Russia discoursing on the social aspects of religion, and Prince Chudhadharn on Buddhism as it exists in Siam. From Lady Henry Somerset came a gracious message, and from such eminent men as Max Müller and Thomas Dwight, papers filled with the ripest fruits of scholarships. A Hindoo monk complained of the patronizing fashion in which he and his fellow orientals had been treated by some of the speakers. "We have been told to accept Christianity," he said, "because Christian nations are prosperous. We look at England, the richest Christian nation of the world. Why is she rich and prosperous? Because she has her foot upon the neck of 250,000,000 Asiatics. We read history and we see everywhere that Christianity has conquered prosperity by cutting the

throats of its followers. At such a price the Hindoo will have none of it."

The science of religions was also discussed, and especially that of theosophy, among the speakers being Annie Besant, who discoursed on Karmic law; G. W. Chakravati, who showed what theosophy was; H. Dharmapala, who pronounced it the basis of all religions; Henrietta Muller, who stated that it revealed the essential humanity of the deity and the ultimate divinity of man; William Q. Judge and Mrs Cooper-Oakley, who explained the theosophic ideas of brotherhood and of death. At the congress of Christian scientists the first paper was read by E. J. Foster-Eddy, its president. In an address on scientific theology, John F. Linscott declared that Christianity as a Christian science was not a religious system but a universal religion, with a universal principle, and capable of universal practice. Other addresses were on the resurrection, on spirit and matter, on God incorporeal, mortals and immortals, prophetic scriptures, healing the sick, the scientific universe, and the brotherhood of man.

Thus the parliament of religions was continued until near the close of the month, some of the speakers mentioned and many others delivering addresses at several sessions. With them and after them were held the meetings of the several religious denominations, whose proceedings cannot here be described in detail. It may be stated in general terms that at the parliament and congresses were discussed the theistic teachings of the great historic faiths, the nature and life of man, his place in the universe, his spirituality, immortality, and his relations and duties to God. Religion was considered apart from morality, as were the various systems of religion, past and present, their defects, and what they have done for mankind, together with religion in the family, in relation to the marriage bond, to home and education, to society and social problems, to science, art, and letters. The fraternity of peoples, the condition and reunion of Christendom and of the whole human family, with the characteristics of the coming faith which should unite mankind in bonds of religious unity, were also among the subjects treated, the parliament closing with expressions of peace and good will in which all the participating sects and nations were represented.



MONSEIGNEUR SATOLLI

At the mission congresses the speeches covered a large variety of topics, among those which attracted most attention being the address of Frank M. Bristol, who took for his subject the unevangelized in Christian lands, attacking the churches in vigorous style for expending their yearly millions in sending missionaries to foreign lands, while near almost every church in Christendom were as dark spots as existed anywhere on earth. Other addresses were on problems and methods, Sunday schools as coöperative agencies, bible societies, tract and book societies, denominational comity and coöperation, and a wide range of subjects touching on missions and their work, George Smith of Edinburgh, in his "geographical survey, especially the totally unreached fields," outlining the condition of foreign lands, and presenting statistics as to the great mission fields of the east. Women held separate conference under the auspices of the International society of woman's missions, and later, joint session with the mission congresses.



BISHOP SAMUEL FALLOWS



At the congress on Sunday rest, which followed, Rabbi Felsenthal made some most sensible remarks in connection with the Sabbath in Judaism, denouncing all legislation which would enjoin on unwilling minorities one certain day for keeping the Sabbath and one certain manner of keeping it. Delegates from several foreign lands were present, and the papers read were numerous, ranging from Sunday closing at the Fair to Sunday rest from the work of railroad transportation.

During the first week of October was held a congress on patents, trade-marks, and inventions, these being classed under the division of intellectual property and thus belonging to the department of government. Many were the papers read by men and women of whom not a few were specially qualified to deal with the subjects under debate. Of unusual interest was the address of Judge Henry W. Blodgett, whose recollections dated back to 1831, when among the problems of the day was how to gather and garner the harvest of the prairies. First was invented a plough that would "scour," and then a more serviceable kind of harrow. The cradle supplanted the sickle and the harvester followed, as did the thrashing machine and the fanning mill. Next came the combination machine which cleaned the grain and placed it in bags, these and other inventions attracting westward an intelligent class of settlers, to whom the use of superior farming implements afforded time and means for self-improvement and self-advancement.



JOHN W. NOBLE

R. J. Gatling, inventor of the gun which bears his name, welcomed the delegates on behalf of the American association of inventors, of which he was president. The greatest monument that the country possessed he pronounced to be the patent office, from which the first year three patents were issued, and in the year 1892 more than 36,000. To Americans were granted twice as many patents as to all the remainder of the world, and some of them were of incalculable benefit. By Mrs Charles Henrotin was read a paper prepared by Helen Blackburn of London on the inventions of women. The first patent issued to a woman was in 1637, for preparing tinctures, as of saffron and roses, and the second in the following year, for an implement for cutting wood into thin pieces, to be made into band-boxes, and sword sheaths. Thenceforth until the end of the eighteenth century the names of only 15 women are found in the

records of the British office, with about 40 for the first half of the nineteenth, and nearly 1,800 between 1852 and 1884, since which latter date there has been a steady increase, year by year, in keeping with the growth of education, wealth, and luxury.

John W. Noble, ex-secretary of the interior, spoke of the interdependence of patents and their relation to the government. Largely through the inventions of the era of civil strife the republic was enabled to sustain its armies and prosecute the war; for the productive lands of the west, though depleted of men, were well supplied with agricultural machinery of improved and recent pattern. William F. Draper, chairman of the house committee on patents, discoursed on the influence of inventions on cotton industries, showing how manufactures had been fostered by improvements in machinery for gathering and preparing the crop and shaping it into fabrics. A plan for an international union for the protection of property in patents, prepared by Swiss contributors, provoked considerable discussion, several of the speakers urging the abolition of the section of the revised statutes which limited the term of an American patent to the shortest term of a foreign patent.

Agriculture was the next topic presented for consideration, and in this group were included not only farming and stock-raising, but farm life, training, and experiment, the construction and care of roads, the veterinary art, and among other subjects, ornithology in its relation to insect pests. To Samuel W. Allerton, who, with Edwin Walker, constituted the first congressional committee to secure the location of the Fair, was intrusted the general direction of the congresses, and present on the platform at the opening session were several chiefs of departments, with many distinguished visitors from foreign lands. By C. C. Bonney were briefly stated the main objects of the agricultural congresses; Allerton declared the condition of the farmer in every way preferable to that of the industrial classes in the city; Lady Somerset related briefly her experience as an English landowner, giving way to Joanne Sorabji of Hindostan, who spoke of the magnificent specimens of physical womanhood in the agricultural districts of India, while Countess di Brazza of Italy described the women of her own sunny land.



WILLIAM F. DRAPER



J. STERLING MORTON

W. J. Buchanan, chief of the Agricultural department, declared that he would not exchange the out-door education he had received in the country for all the college lore that could be placed before him. But the speech which attracted most attention was that of J. Sterling Morton, secretary of the national department of agriculture, who inveighed against granges and other agricultural organizations, which, as he said, "for political purposes farmed the farmer." The gauge of battle thus thrown down was taken up on the succeeding day by Colonel J. B. Brigham of Ohio, who thus

took exception to the secretary's remarks. "Every advance, every new invention of farm machinery, every experiment which has been helpful to the farmer, has been promoted by the grange, and if it were not for the grange and the alliance, our country would have no secretary of agriculture." Continuing, he asserted that it would be better for congress to have more of the agricultural element in the halls of legislature, and that when the great struggle came between political corruption and political integrity, the country would turn for salvation to the men of the farm. Agricultural interests in the south were discussed by a Louisiana woman, who spoke of the close attention to drainage, fertilization, and suitable machinery, as applied to the production of sugar, claiming that in no industry common to the United States was cultivation more thorough than on a sugar plantation. Other speakers dealt with the educational and social features of farm organization, and with what Connecticut had done for agriculture, especially in the raising of choice live-stock and the establishment of state experimental stations.



CONGRESS OF VEGETARIANS

of county and state taxation. The general consensus of opinion, however, seemed to favor special legislation by the states.

By chief Buchanan was prepared the programme which, during July and August, was carried out in the assembly hall adjoining the Agricultural building. Here subjects were discussed relating to all the divisions of his department; horticulture, agriculture proper, live-stock, and forestry, the lectures on forestry alone covering a period of ten days. Such topics were considered as the scientific care of forests, the latest methods of tree planting, the effects upon climate of tree culture and of the denudation of woodlands, with the best means of destroying insects harmful to the crops. There was also contributed by delegates a great variety of information concerning the forests and timber trees of Europe, Asia, Africa, and America. Among those who participated were B. E. Fernow, chief of the government forestry division; A. S. Hardy, Canadian commissioner of crown lands; Robert Hudson of New South Wales; Alfred B. King, commissioner for Siberia; J. J. Grinlinton, commissioner for Ceylon; C. B. Waldron of the state agricultural college at Fargo, South Dakota; C. S. Sargent of New York, and M. L. Saley of Chicago, the last named speaker taking as his text "ignorance concerning woods."

J. C. Vaughan was general chairman of the horticultural congress, which dealt with subjects of special and general interest, J. M. Samuels of the horticultural department, and John Thorpe, superintendent of the floricultural bureau, being members of the executive committee. Representatives were present from Germany, France, Holland, Denmark, and other European countries where the raising of fruits and flowers has been made a study, as well as from the eastern, middle, and western states, in which these industries are most developed. The seedsmen and nurserymen occupied separate halls, the papers submitted covering such topics as the care of public grounds, the work of experiment stations, the past, present, and future of floriculture in the United States, and how best to protect the interests of those who first raised distinct species of plants. L. Wittmack of Berlin took for his theme "horticultural displays at future world's fairs," intimating that despite its wonderful landscape effects, the Columbian Exposition was somewhat lacking in floricultural adornment, especially in contributions from foreign lands.

In connection with the agricultural congresses was one on household economics in relation to farm and village communities. This was of course in the hands of women, and of the papers read, especially those on domestic service, some of the most interesting were from foreigners to whom have been accorded exceptional opportunities for studying the problems of domestic life. Frau Morgenstern of Germany, Frau Meyer of Switzerland, and Frau Bundy, president of the Housekeepers' union of Austria were all agreed that in their several countries conditions differed but little from those which here obtain. There was the same difficulty in procuring competent and reliable servants, the same restlessness and instability of character. In Austria, said Frau Bundy, the situation was even worse; for the laws pertaining to domestic service were such as to provoke ceaseless litigation between employers and employed.

In the congress on agricultural training and experiment, the directors of the stations scattered through the states, forming the membership of the national association, discussed the work of their institutions and their plans for the future. The road congress was of special interest to the farming community. It was held by the chairman, Theodore Butterworth, that while the United States led the world in its railways, it was behind European countries in highway roads. A. A. Pope of Boston took an active part in the proceedings, as from the commencement he has in the agitation over defective roads, so detrimental to the well-being of American agriculturists. Various plans were suggested for the construction and drainage of highways, with systems of coöperation between farmers and residents of villages, or



HENRY W. ROGERS



Mrs John Wilkinson was chairman of the congress on household economics, and Mrs Laura D. Worley of the one on farm life and mental culture. At the latter most of the addresses were from women; but among the participants were many male representatives from foreign lands. All the speakers dealt with agricultural training in their several countries, some of them also touching on agricultural societies and resources.

Last on the programme was the real estate congress, held under the auspices of the National Real Estate association of the United States, its session beginning a few days before the close of the Fair. In his opening address C. C. Bonney touched on the history of land tenure, which among the Aryan races, even in prehistoric times, was of a threefold nature—first, in common for pasture or public use; second, by allotment

for cultivation or business purposes; third, by allotment for homes. Long before history was written, the homestead was held inviolable, and in the doctrine of homestead exemption there was nothing new; for here neither king nor officer might enter unbidden. Homes of moderate value should be free from taxation, and conveyances simple, easily executed, and easily understood; so that property, when not bequeathed by will, would descend to those to whom of right it belonged. Thomas B. Bryan, who was appointed chairman, also urged the simplification of titles, stating that for this purpose were needed not only judicious laws, but permanency and uniformity of legislation.

On behalf of the National Real Estate association, Henry L. Turner welcomed the delegates in apt and complimentary phrase. Suitable responses were made by Albert C. Spam for the eastern states, George A. Armistead for the south, and Thomas Cochran for the west, other speakers being Senator Saunders and Judge Waterman, the latter urging the necessity of providing homes for the working classes. At another session foreign delegates explained the existing usages in their several countries, and one of the subjects discussed was "how and to what extent we can attain national and international uniformity in realty laws." The Torrens system, as it obtains in Australia, with objections to its adoption by the United States was also considered, and an interesting paper was read on "real estate as the ideal asset."

In conclusion it may be said as to the congresses, that while at times their discussions may have been prolix and tiresome, while there was perhaps too much dissertation "*de omnibus rebus et quibusdam aliis*," many new ideas were evolved, many old ones were presented in better shape, and many a plan was formulated which shall bear fruit long after the material exhibits of the Fair have been scattered among the nations of the earth. To supple-

ment this material display, by adding to the choicest specimens of human achievement the latest developments in human thought, was the purpose of the Auxiliary, and without it the Columbian Exposition would have been incomplete. Here was the soul of the Exposition, just as in the temples of Jackson park was its body; the one shall perish, but the other shall live again in the lives of millions yet to be.



FLOWER GIRL

WORLD'S FAIR MISCELLANY.—Early in June the vegetarians held an international conference, beginning with a reception to visiting delegates, after which were lectures and addresses by prominent members of the cult from Europe and the United States. The main purpose was to promote the interests of the Vegetarian Federal union, and to discourage the eating of flesh, though aiding incidentally all temperance movements and agencies. It was claimed by vegetarians that most people were prejudiced against their tenets, and certain it is that what they had to say was worth the hearing; for nearly one half of mankind are vegetarians either through choice or necessity.

At the congress on municipal government Mrs Alice Lincoln read a paper on tenement houses and the people who live in them, with valuable suggestions as to the erection and care of such houses, especially in New York, where 1,250,000 people lived in flats. As an experiment she had purchased, arranged, and fitted up a tenement block in Boston, and had trained the tenants to ways of cleanliness and morality, with most satisfactory results. The poor should be helped, and above all should be taught to help themselves, to which end she offered many practical hints.

Mrs Florence Kelley spoke on the relations of the municipality to the sweating system, and Mrs Ralph Trautmann on the sanitary reforms effected by women in New York. At this congress also was considered the subject of commercial arbitration, with other methods of adjusting differences between business men and between employers and employed.

At the humane and waifs' saving congresses, held toward the close of the Fair, with David Swing as chairman of the former and Mrs Perry H. Smith of the latter, several papers were presented by women, among them the countess di Brazza, Mary A. Lovell, and Harriett G. Hosmer.

Among those who took part in the mission congresses was Mary C. Collins, called Winona by the Sioux Indians, among whom she has lived for many years, with Sitting Bull, Rain-in-the-Face, and other chieftains near her home on the prairie. She stated that she had gone back and forth among them by day and night without meeting with a discourteous word or look, claiming for the Sioux a nobility of character which the world does not seem willing to accord.



## CHAPTER THE TWENTY-SEVENTH

### RESULTS, AWARDS, AND INCIDENTS



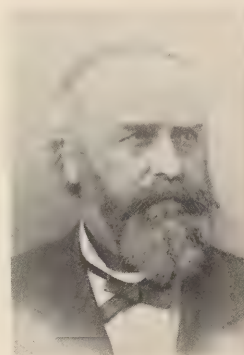
OF all the pleasant features connected with the Fair, one of the most pleasant was the appreciation, we might almost say the affection with which it was regarded. Of all the lessons it has taught, perhaps the most valuable was that nations, like individuals, should not dwell apart, without interchange of commodities, thoughts, and ideals; nor is there anything that tends more surely to a universal brotherhood of nations than to become acquainted with the best that each has produced. While the greatest international exposition that the world ever witnessed has passed into history, it has bequeathed a heritage for good which cannot readily be estimated, shedding a flood of light on millions of lives and filling the land with the sunshine of beauty and truth. The barriers of isolation, with the ignorance and egotism which it begets, were broken asunder; new thoughts and aspirations stirred unnumbered souls, and men and women were awakened to broader views, to nobler aims than ever before they had known. All too soon the great object lesson was ended, teaching to many nationalities, and especially teaching to Americans, what a

people may hope to do and to become; but of such lessons the results are far-reaching, pointing the way to further progress and showing to man, as nothing else could show, what "in part he is and wholly hopes to be."

As the 30th of October drew near, the question was discussed of protracting the season of the Fair beyond the appointed time; for during that month the attendance was by far the largest recorded, amounting to nearly one-half of the total admissions for the previous term. It was at first proposed to preserve intact the buildings, and as far as possible the exhibits, for a second fair to be held in 1894; but to this the park commissioners objected, insisting that the grounds be placed at their disposal on the 1st of January, as in the original agreement. It was finally determined to close on the date selected, but that the Exposition should remain open informally so long as the admission fees continued to swell the revenue. Thus its lustre would be preserved undimmed and its promises fulfilled, with all obligations met.

For Columbus or closing day an elaborate programme had been prepared; but this was the saddest day of all, a day of jubilee turned into mourning; for the mayor of Chicago, Carter H. Harrison, who was held in high esteem and respect by his fellow men, lay stricken dead by the hand of an assassin. The ceremonies were therefore of the simplest, all joyous features being omitted, as the jubilee march, the firing of salutes, and the national melodies of all the nations represented. In Festival hall were gathered some 2,000 persons, among them many of the national commissioners, the directors and officials, and the members of the Board of Lady Managers. First were heard the strains of the funeral march, and after a brief address from Thomas W. Palmer came prayer by John H. Barrows, followed by resolutions of respect. Then the Exposition was declared to be at an end, and after a farewell speech from H. N. Higinbotham the benediction was pronounced, and without demonstrations of any kind the assemblage dispersed, slowly and with the silence of respect.

In considering the material results of the Fair may first be mentioned its attendance, in which, as in other respects, there were many exceptional features. In an early



CARTER H. HARRISON



number of this work it was stated that an average attendance of 150,000 a day, as anticipated by the managers, was by no means an extravagant estimate. The actual returns show a daily average of nearly 154,000. During the 179 days that the gates were open, 27,529,400 persons were admitted, 21,477,212 being paid admissions and 6,052,188 from passes. Thus the total was nearly thrice as large as at the Centennial Exposition, and came singularly close to that at the Paris Exposition of 1889, which remaining open four days longer had somewhat over 28,000,000 visitors. But at first there seemed little prospect that the hopes of the directors would be realized. On opening day, the 1st of May, the admissions were 137,557, but on the following day fell to less than 20,000, and for the first half of the month, with a



BUREAU OF PUBLIC COMFORT

single exception, never rose to 40,000. The Fair had a deserted appearance; no one was there, or at least not enough to give to it a cheerful and life-like aspect. In the Fisheries building, and one or two others where all the exhibits were in place, there was at times a moderate gathering; but in the great hall of Manufactures, with its 40 acres of floor space, were barely sufficient people to furnish a congregation for a village church. The Fair was not ready, and especially the Manufactures building was not ready; on its ground floor were many vacant sections, and in the galleries there was little to be seen, except bare floors and shelving. Moreover the weather was chill and damp; for winter lingers long on the shores of Michigan, and no vernal airs are those which blow from bleak Canadian plains.

During the first month and a portion of the second the admissions were almost restricted to the people of Chicago and its neighborhood; but slowly at first, and then more rapidly, the attendance began to

increase; for those who came from a distance returned with most favorable reports, and the journals of the civilized world were filled with glowing accounts of the wondrous spectacle. Thus the daily admissions, which up to the first few days of June only thrice exceeded 100,000, never afterward, except on Sundays, fell below that figure, the total for June being considerably more than double the number for the previous month, while July showed a further improvement, August and September a large additional gain, and October an aggregate of nearly 8,000,000. That the attendance was not larger for the earlier part of the term was due not only to the unfinished condition of the Fair, but to the policy of the railroads, which made but a nominal reduction in fares, while during the later portion, financial panic and commercial prostration were strongly antagonistic factors. The summer and autumn of 1893 will long be remembered as a season of straitness and distress such as never before had overtaken the business



PILGRIMS OF THE FAIR

community of the United States. Banks were suspending by the dozen; capitalists were trembling for their investments; factories were closing, and everywhere employment was scarce and ill required. From such a condition of affairs the Exposition could not fail to suffer in common with all other enterprises.

While against the railroads there were many complaints, as to local facilities for transportation to the grounds, and within the grounds, there was nothing left to be desired; nor was there more of difficulty in handling the daily gathering of 200,000 or 300,000, late in the term, than in disposing of the 20,000 or 30,000 who formed the daily attendance during the opening week. Worthy of note was the decorous conduct of the sight-seers, largely composed of the citizens of Chicago and its suburbs, with farmers, business men, and mechanics from within a radius of 200 or 300 miles. Said Chauncey M. Depew in describing the attractions of the Fair:



PROFILE OF MANUFACTURES AND ELECTRICITY BUILDINGS



"After all the most pleasing thing about it is the crowd. It is a typically American, orderly, good-natured, intelligent crowd, anxious to see everything that is to be seen, asking questions in a way that makes you glad to answer them, and answering questions in a way that makes you glad to ask them. There is no crowding, no elbowing people out of the way to get a better place where temporarily there is a great number of people wanting to see the same sight. I have yet to observe on the grounds, by day or night, a single drunken or disorderly person, or any emergency at any time when a guard or policeman was required."

As with the attendance at the Exposition, so with its finances, the opening weeks were full of disappointment. For May the total receipts from all sources were only \$616,140, or but a trifle above operating expenses. At this time the outlook was of the gloomiest, and it was even whispered abroad that the Fair would go into the hands of a receiver. Matters began to improve, however, and in June the income was \$1,647,644, against an outlay of \$630,505, leaving a balance of more than \$1,000,000. In July there was a further improvement, the figures being respectively \$1,907,194 and \$598,319, with a surplus of \$1,368,874. Yet now that half the term was completed, there seemed little prospect that all obligations could be met; for apart from the \$5,000,000 in bonds loaned by the city of Chicago, there were many outstanding liabilities. But still the prospect brightened, August showing a



A SIDE AVENUE IN JACKSON PARK

surplus of \$1,768,058; September, \$2,632,372, and October, \$3,792,467; the total income from admissions and concessions amounting to \$14,141,242, the working expenses to \$3,540,037, and the balance to \$10,601,205, with average daily receipts, excluding Sundays, of \$89,501, and an average outlay of \$22,405.

In his final balance sheet William K. Ackerman, auditor of the Exposition, presented a condensed report of its finances, showing receipts from all sources of \$28,151,169, against a total expenditure of \$25,540,538, thus leaving the Fair on its closing day with assets amounting to \$2,610,631. From this, however, a large sum must be deducted for outlay yet to be incurred, while additional amounts would accrue from gate receipts, concessions, and other sources. For admission fees there had been received up to the 31st of October, \$10,626,331; from concessionaires, \$3,699,581; from the sale of souvenir coins with premiums thereon, \$2,448,032; from subscriptions to capital stock, \$5,604,172; from city of Chicago bonds, \$5,000,000, and from miscellaneous items, \$686,070. The expenditure was, for construction, \$18,322,623; for general and operating expenses, \$7,127,240, and for preliminary organization, \$90,675. After all obligations had been paid, sufficient remained for a dividend of ten per cent on the ordinary stock, this being subscribed with little expectation of any return in cash. While the cost of construction and operation exceeded the original estimate by some \$4,000,000, the estimated receipts—\$10,000,000 for admissions and \$3,500,000 for the sale of privileges and concessions—were more than \$700,000 below the actual results.



A SECTION OF THE MINING BUILDING

As compared with the Centennial Fair the returns show more than a threefold gain, and were nearly twice as large as for the Paris Fair of 1889, the receipts of which far exceeded those of any former display. At Paris, however, the admission fee was but 20 cents against 50 cents at Jackson park, while the cost of construction and operation, with all other expenses, was less than one third of that which was incurred at Chicago. Including the \$10,000,000 or \$11,000,000 contributed by states and foreign nations, increasing the total to more than \$36,000,000 in all, the Columbian Exposition was at least thrice as expensive as the most costly of its predecessors; needlessly expensive as some have thought, though considering the results achieved, there are few who will take

exception to the investment of a few millions more or less. The preliminary work, before the foundations of the first building were laid, the drainage of marsh lands, the grading and filling, the viaducts, bridges, and piers, the construction of artificial waterways, these and other items entailed charges more than twice as heavy as the entire cost of the first great international exhibition, held in London in 1851. But the citizens of Chicago are accustomed to great undertakings, and they were not the men to hesitate at this the greatest of all.

While in other respects the financial estimates of the management were more than realized, they were entirely at fault as to the matter of salvage, for which only a nominal sum was received. After the close of the Fair the white city became a white elephant on the hands of the directors. Few wanted the buildings at any price, either for removal or for their materials; for Chicago was largely overbuilt, especially in the neighborhood of the Exposition, and seldom had so many dwellings and stores been vacant. Then came trouble with the park commissioners, whose valuation of the improvements made on the grounds differed widely from those of the managers. By the latter were scheduled under the heading of salvage some 20,000 tons of iron and steel, 30,000,000 or 40,000,000 feet of lumber, 22,000,000 bricks, and 1,400,000 square feet of glass. Then, as permanent improvements, there were dredging, filling, and grading; piers, bridges, walks, and roadways, with the piping which drained the marsh lands of the park, these and other items being valued at more than \$2,000,000. The board of commissioners, on the other hand, estimated all permanent improvements at



JUDGES OF AWARD

less than \$100,000, claiming that Jackson park had been damaged, especially through the destruction of timber, to the extent of \$540,000. The difference of \$440,000 they demanded as the basis for a final settlement and for a release from all further obligations. At length the matter was settled by the payment of \$200,000 and the transfer of the buildings and all other property to the board.

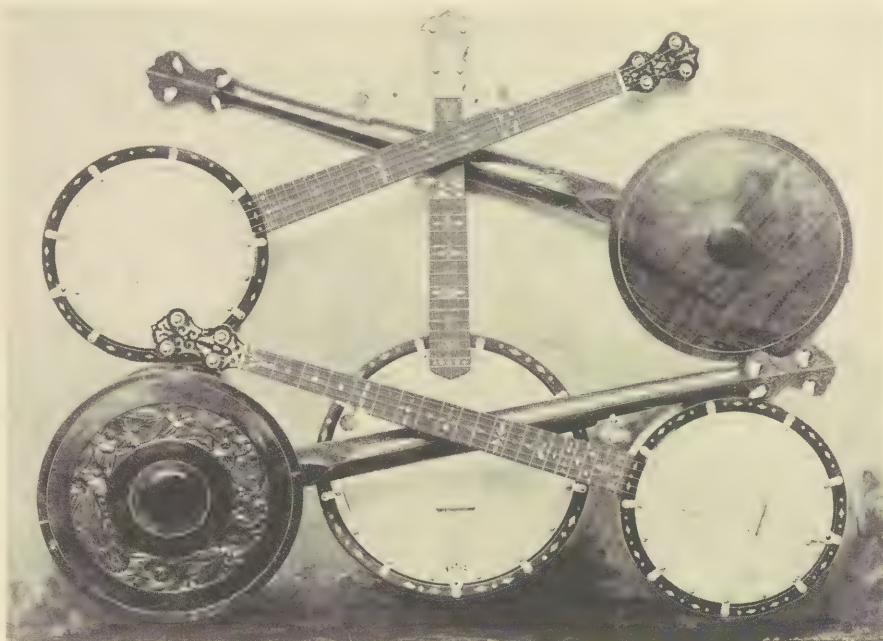
Still the question remained as to what should be done with the buildings, for which the highest bid from responsible parties was \$80,000, or less than one per cent of their cost. But the problem was solved in a manner that few had anticipated, and for which the contracting parties were entirely unprepared. About dusk on the night of January 8th a fire broke out in the casino and thence swept across the peristyle to the music hall, all of which, together with the quadriga were consumed. Then the Agricultural building was threatened, and for a time it appeared that no human power could save from destruction the palaces clustered around the court of honor. But by a sudden shifting of the wind the flames were carried toward the Manufactures building, and through its glass roof and the clear-story beneath, a shower of firebrands fell among cases packed with exhibits, of which about \$50,000 worth were destroyed, most of them by water and in the French section, where the remaining goods had not been packed, as elsewhere, in water-proof cases.

But that which was threatened on this winter night occurred a few months later. On the evening of



the 5th of July some lads at play near the terminal station observed the gleam of fire within, and entering the depot tried for several minutes to stamp it out; but these few minutes were fatal to the existence of several among the most sightly temples of the Fair. It was a hot summer day; the buildings were dry as tinder; water was scarce; the fire engines far away, and a fierce gale was blowing from the southwest, fanning into a conflagration that which when first discovered was but an insignificant blaze. By the time the engines were fairly at work the terminal station was one flaming mass, and leaping across the plaza the fire had seized on the Administration building, the dome of which fell with an appalling crash, covering with burning cinders and brands the Mining, and Electricity buildings, both of which were quickly ablaze. To these were added, a few minutes later, the halls of Manufactures and Transportation, though through the efforts of the firemen a portion of the latter was saved. Meanwhile from the railroad terminus the conflagration had spread to the Machinery and Agricultural buildings, the one being utterly destroyed and the other damaged almost beyond recognition.

The burning of the Manufactures building was a sight that will never be forgotten by those who witnessed this tragic climax in the destruction of the white city. Almost as soon as the fire laid hold of it the vast semi-circular roof fell in, with its 11 acres of skylights and its 65 carloads of glass. Then it was seen that the whole interior was aflame, while from hundreds of windows tongues and jets of fire cast far on the dun waters of lake and lagoon their red and fearsome glare. Presently the frame began to totter; one after another the huge façades fell inward with a deafening roar, and of this mammoth temple of the Exposition there was nothing left, save for the lurid skeleton of a wall. It was now the time of the railroad strike, and as the conflagration reflected in the sky was seen by neighboring cities inland and on the shores of Michigan, messages of inquiry came pouring in by hundreds. Fresh in the minds of many was the great fire of 1871, and with anarchy and lawlessness still unchained, it was feared that the rabble was inflicting on Chicago a repetition of that dread disaster. As to the origin of either conflagration nothing definite was ascertained, though both were believed to be the work of incendiaries, probably of the vagrant horde which infested the streets by day and slept at night wherever darkness overtook them.



PRIZE BANJOS



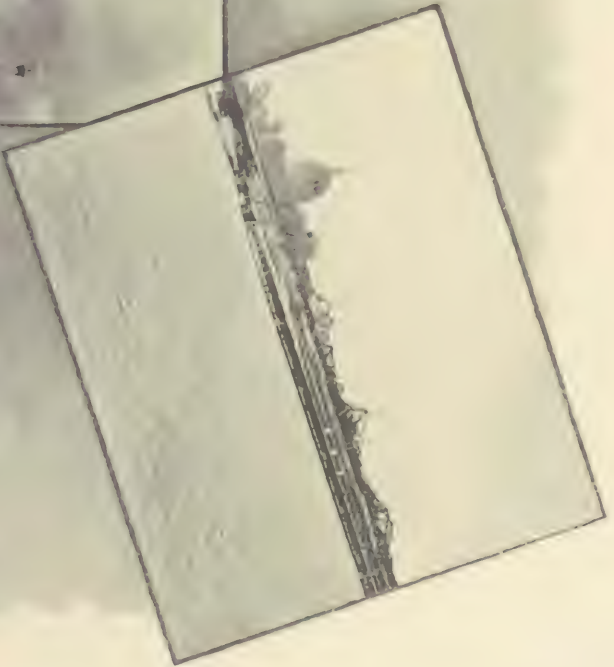
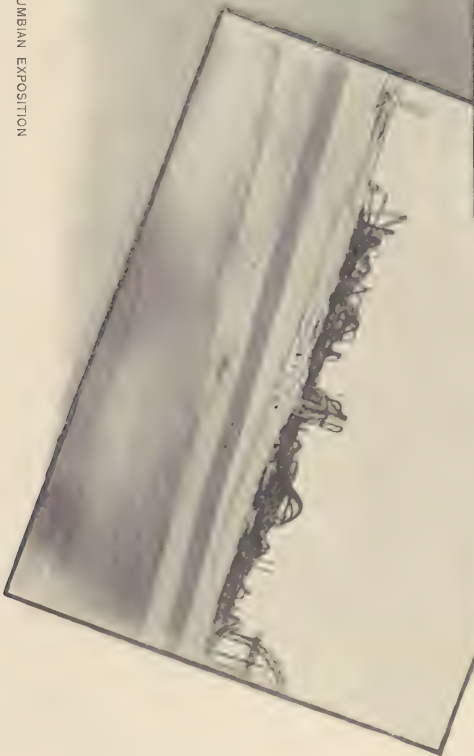
THE OLDEST STOVE IN AMERICA

As to the influence of the Fair on the business interests of Chicago, while the immediate effect was to place a large volume of currency in circulation, and the future effect would be to open still further to her merchants the markets of the world, there were those who declared that in other respects it must for a time be a positive detriment. It is probable that the average amount expended by visitors was not far short of \$2,500,000 a week, or about \$65,000,000 for the six months' term. On the other hand there was overbuilding, with inflation of real estate values, so that several years must elapse before the normal growth of the city would warrant the prices demanded. For more than a year after Chicago was selected for the site of the Exposition, property continued to advance; but there it remained, awaiting the opening of the Fair, and there it still remains, awaiting purchasers who cannot readily be found. Long after closing day, many hundreds of costly tenements stood vacant, and as to furniture it could not be given away, serviceable mattresses, for instance, selling at one cent apiece, and those of superior quality for two cents. But with the means of speedy, cheap, and frequent communication extended in all directions, and, especially toward Jackson park, this can be but a temporary



THE PERISTYLE AFTER THE FIRE OF JANUARY 8TH, 1894





THE REMNANTS OF THE COLUMBIAN EXPOSITION

condition of affairs; for there is no more steadily prosperous city than the midcontinent metropolis, and none with stronger recuperative powers.

A feature in the Columbian Exposition as compared with others of its class was the enormous sale of exhibits, and especially of foreign exhibits, eight of the nations best represented selling in all more than \$10,000,000 worth of goods. Of some of the articles displayed many duplicates were ordered, more than 200 being required, as is said, for one of the Italian wood carvings. During the six months' term at least \$2,500,000 was expended in the various Italian sections, most of the purchases being of marbles, porcelains, bronzes, and wood carvings. Of the marbles, some of them very costly, few were returned to Italy, and in the Art galleries many of the Italian paintings were sold. To Germans about \$1,500,000 was paid, mainly for carved ivory, meerschaums, and cutlery. Of Japanese porcelains, panels, and lacquer work almost the entire stock was exhausted, the sales in the Japanese sections, with those of England, France, and Austria, each exceeding \$1,000,000, while to Spain was accredited \$750,000, largely for works of art, and to Russia an equal amount for bronzes, furs, and gold ware.

As stated by the committee of awards, the number of exhibits exceeded 250,000, and of individual exhibitors was 65,422, to whom must be added those from France and Norway, whose groups were withdrawn from examination, increasing the total to nearly 70,000 participants, against 61,722 at the Paris Exposition of 1889, and 31,000 at the Centennial Exposition. At all the great world's fairs a large percentage of medals was awarded, so large it would seem, as somewhat to detract from their value. At Vienna, for instance, in 1873, about 26,000 medals were distributed among 42,000, or 62 per cent of the exhibitors, with 42 per cent at Philadelphia in 1876 and 55 at Paris in 1889. At Chicago the percentage was 36, or the lowest yet recorded, 21,000 exhibitors receiving 23,757 awards, for many were represented in more than a single group. Thus it will be seen that the proportion of awards to exhibitors was about as one to three, and to exhibits as one to eleven, a liberal but not an excessive distribution.

In the regulations governing awards it was provided first of all that "they should be granted upon specific points of excellence or advancement formulated in words by a board of judges or examiners, who shall be competent experts." In engaging the services of competent examiners the utmost care was exercised, correspondence being opened with many hundreds of societies and technical organizations, while at the request of the committee lists were submitted by foreign nations, including men of repute as scholars and scientists. There were in all 852 judges, divided into committees of which one was assigned to each of the main departments, one or more women to be appointed to each committee authorized to pass on exhibits consisting entirely or in part of woman's work. By

the executive committee individual judges were appointed to examine certain groups and to report thereon, selecting those deemed worthy of awards and stating, as mentioned above, the grounds on which the selection was made, the report to be submitted to the department committee of which he was a member, and transmitted for final approval to the executive committee.

In bestowing its awards the Columbian Exposition differed in some respects from most of its predecessors. First of all they were non-competitive; for as the executive committee remarked, in an exposition designed to illustrate the development of the resources of the United States and the progress of civilization in the New World, as compared with all participating nations, the results should be placed on a higher plane than merely to indicate the relative merits of competing exhibits. Rather should be indicated some independent and essential excellence in the article displayed, denoting improvement in the condition of the art which it represents. Thus the awards would constitute an enduring record of progress as represented by the exhibits in question, the certificate serving for identification and the medal as a memento of success. Of the latter there would be but a single class; nor would there be granted either money or graded awards of any description. All the medals were to be made of bronze and all must be alike, except that on each would be inscribed the name of the exhibitor. Under such a system there was, as might be expected, less friction than at former expositions, only 259 complaints being entered among more than 65,000 exhibitors, while of these but 43 were carried to appeal.

To the various committees with their individual members, and especially to the executive committee, of which John B. Thacher is chairman, credit is due for their faithful performance of a thankless and arduous



FESTIVAL HALL



task. First there was the want of funds for clerical and other expenses, including the compensation of judges, for which no appropriation was made by congress until March of 1893. Then came the appointment of judges, who were selected with such discretion that not one in a hundred proved incompetent, and there was but a single case of doubtful integrity. The examinations made by these judges were conducted with the utmost care and precision; so that few deserving exhibits failed to receive an award, while the total number was kept within reasonable limits. Especially is to be commended the non-competitive system, avoiding the obnoxious and almost impossible task of a relative discrimination between more than three-score thousand participants, with all the jealousy and dissatisfaction which such an adjudication could not have failed to arouse. Nevertheless objection was taken by many, on the ground that it bestowed no definite and distinctive badge of merit on any single exhibit.

The architects of the principal buildings, of many of the state and foreign buildings, and even of the Midway and other structures received awards from the judges in the Liberal Arts department, in which are included public works and constructive architecture. Suitable honors were also bestowed on all nations, states, municipalities, public institutions, and other organizations which contributed substantially to the success of the



RUSSIAN CHORUS

Fair, together with such individuals and societies as by their achievements or inventions, or by the development of arts and industries, have aided the cause of civilization. For these, in addition to the Exposition medal, a diploma of honor was prepared. Both medals and diplomas were prepared under the direction of the secretary of the treasury, and with these the executive committee had nothing to do, except for the correction of clerical errors. For the diplomas the design was intrusted to William Low, by whom was executed much of the fresco work of the Fair, and for the medal to Augustus St Gaudens, of whom mention is made in connection with its decorative statuary. Both are of excellent workmanship and have been pronounced by competent critics superior to any before provided for similar purposes.

Early in the term of the Fair large numbers of exhibits were donated to the management, for among the groups were not a few which, though valuable as exhibits, had not enough intrinsic value to pay for the cost of homeward transportation. In the department of Mines and Mining, for instance, there were bulky collections from countries as far distant as New South Wales, the return of which was practically impossible, and if returned they would no longer be kept together as collections. From state and foreign commissioners came liberal offers of contributions, while in each division of the Fair many of the articles displayed were donated by exhibitors, and others could be had almost for the asking. Then there were the collections in the Anthropological division, with their rare and curious relics, most of them the property of the Exposition. What disposition should be made of all this property was a question that confronted the directors long before closing day drew nigh. Something should be done, and that at once; for the time was short, and many universities and scientific associations were anxious to secure the treasures which belonged of right to Chicago, there to be preserved intact in a memorial museum, which with further accretions would form such a storehouse as does not exist elsewhere in the United States.

During the first week of August the question was considered by the directory, three members of which—George R. Davis, Harlow N. Higinbotham, and James W. Scott—were appointed a committee to canvass the

situation and formulate a plan. But whatever was done should be done, as the directors considered, by the citizens themselves, as an enterprise belonging distinctly to Chicago, and not merely as an offshoot of its fair. Hence, a few days later, a meeting was held of men prominent in business, scientific, and educational circles, and after a brief discussion, two committees were appointed; one on organization, the other, including all the chiefs of departments with the director-general as chairman, to secure and take charge of exhibits. Within less than a month a large number of additional collections, such as would complete the scientific and historical chain of exhibits, had been obtained by purchase or contribution, mainly from the Anthropological, Transportation, and Mining divisions.

But in this the Columbian museum, as in the Exposition itself, was to be covered the entire field of science, giving perpetuity to much that was best worth preserving in the ephemeral city of the Fair. First, there should be secured a building of sufficient size, arranged with a view to permit additions in future years, and under control of an administrative board so organized as to be worthy of implicit confidence. These matters once assured, thousands of articles which else would have been scattered broadcast over the world were presented to the museum. In the first days of November was transferred, either as gifts or loans, the entire collection of Columbian relics in the convent of La Rabida, except for articles owned by the vatican and by the duke of Veragua. Then came a number of curios, documents, and other contributions from the United States government, including the weapons and garments of the ancient races of America. Denmark contributed a portion of the Thorwaldsen exhibit in the Manufactures building, including models of the house in which he was born and of the museum that bears his name, with photographs of his statues. Japan gave many artistic curiosities, with statistical tables and diagrams illustrating the resources of the country. So with other nations and with many of the states, while corporations and individuals were equally liberal, the total value of exhibits donated exceeding \$1,000,000. Meanwhile agents were at work, selecting from each department of the Fair the choicest and most appropriate exhibits that could be secured at moderate cost.



MARSHALL FIELD

But more generous still were the donations in money from the citizens and corporations of Chicago, fully in keeping with their proverbial liberality, and stimulated doubtless by a worthy pride that would not permit the Fair to vanish without a monument commensurate with its greatness. First of all came a gift of \$1,000,000 from Marshall Field, on condition that an additional \$500,000 be raised and that \$2,000,000 of Exposition stock be assigned to the trustees of the museum. Both conditions were readily fulfilled; Harlow N. Higinbotham, George M. Pullman, and L. Z. Leiter each subscribing \$100,000, and Mrs Sturges and the City Railway company each \$50,000, this total of \$1,400,000 being increased by further benefactions. Thus freely did the city which collected more than \$10,000,000

for the Fair contribute toward its perpetuation.

To erect a special building for the accommodation of the museum collections was not possible within the limit of time; nor was such a building required; for among the temples of the Fair, soon to be demolished and their contents removed, there was one at least that would answer the purpose for many a year to come. This was the palace of Fine Arts, the architectural gem of the Exposition and also one of its most substantial edifices, with spacious transept, nave, and galleries, affording with its annexes sufficient space for a museum almost as large as the one at the national capital. Here were arranged the various groups, including contributions from nearly all the main departments, from state and foreign exhibits, and from the Midway plaisance.

Another outcome of the Exposition, and a no less important one, though as yet on a smaller scale, was a permanent museum of woman's work, for which at the closing session of the Lady Managers, Potter Palmer, through his wife as president of the board, announced a subscription of \$200,000, on condition that a proper site be secured.

Music was a strong feature of the Exposition, and like the Exposition itself of an educational and artistic character, though in a measure adapted to popular taste. The appropriations for this purpose were on a liberal scale, two special buildings being erected—Festival hall, facing an arm of the lagoon near the wooded island, and the music hall proper, forming a part of the architectural composition whose leading feature was the peristyle. Of these the cost was \$222,000; for a permanent orchestra \$175,000 was voted; out-door music costing almost as much, while running expenses and miscellaneous items swelled the total to \$551,800, to which must be added the receipts from 137 concerts at which an admission fee was demanded, 60 being given free of charge.

In order to carry out the objects of the bureau of music the coöperation was invited of all the more prominent choral



AN ELECTRIC LAUNCH



societies throughout the United States. Invitations were forwarded to the New York Philharmonic society, the Boston and New York Symphony orchestras, and the principal male voice societies were requested to join in a three days' festival and to study the parts assigned to them. The most eminent of European composers, such men as Verdi, Gounod, Saint-Saens, Mascagni, Rubinstein, Dvorak, and Arthur S. Sullivan were asked to visit the Fair as guests, there to conduct renditions of their several works. To performers and musical organizations, including Joachim's string quartette and the choir of the Sistine chapel in Rome, a similar call was extended, and to all a liberal honorarium was tendered, not as a matter of business but for the expenses of travel.

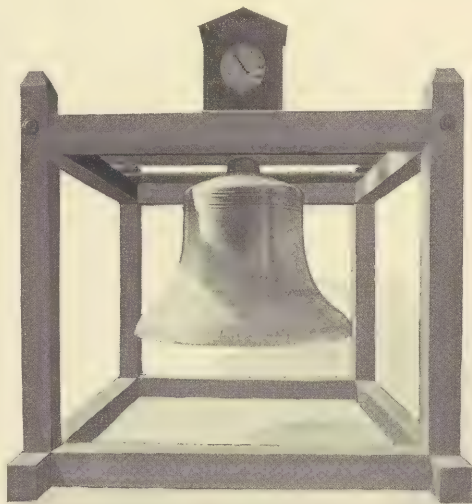
Thus it will be seen that the musical programme of the Fair, as with its Congress Auxiliary, was in keeping with the grandeur of the material display; but though well worthy of the occasion, its success was less complete than had been anticipated, for against it several causes militated. First, the high railroad fares, in which no concession was made, forbade the coöperation of many of the best trained choral societies. Then, of the more prominent European musicians few were able to attend, and even from these the invitation was withdrawn; for over the Fair in its earlier term a financial crisis impended. As late as August, so discouraging was the business prospect that the management unwillingly accepted the resignation of Theodore Thomas as musical director, and made arrangements to disband its orchestra. Later, when prospects brightened, nothing could be done; for Thomas, who had been grossly maligned by a portion of the press, refused to return, and his orchestra had ceased to exist, though high-class music was still rendered under the direction of Max Bendix.

Of the concerts given by the Exposition orchestra 53 were free and there were 32 at which an admission fee was charged. The latter were intended to place before men and women of cultured musical taste a complete illustration of the highest forms of music as it exists among the foremost nations of the world. But while these concerts were in progress, the attendance at the Fair was most discouraging, and before the project could be fairly tested, the bureau of music was compelled to abandon many of its most cherished schemes. At the free concerts the average attendance was not short of 3,500 persons, all listening in wrapt attention, though most of them had never before heard a concert orchestra. It was among this class of people, among those whose knowledge of instrumentation was limited to the brass band and to such as the theatre affords, that Thomas sought to create a taste for music of the better class, giving them not the highest but the best of high-class popular music. Of organ concerts there were 62; of choral concerts 36, in most of which the Exposition orchestra participated; two concerts each were given by the Boston and New York Symphony orchestras, and there were a few chamber concerts and pianoforte recitals.

While none of the high-class concerts were continued throughout the term, there were many performances of special merit, among them the Wagner festivals and the orchestral symphony concerts. In the choral concerts, under the joint control of William L. Tomlins and Theodore Thomas, many prominent societies participated, including the famous Apollo club of Chicago. There were also concerts at which were heard the fresh, young voices of 1,000 children, and others were given by German and Scandinavian singers, and by the Lineff Russian choir. Organ recitals were frequent, among the performers being Alexandre Guilmant, whose appearance was one of the events of the season, as also was that of Paderewski, Lillian Nordica, and Antonin Dvorak.

A feature in the musical department of the Fair was the afternoon concerts given in the Woman's building, the success of which was largely due to Mrs Clarke, as chairman of committee on music, and to Mrs Barbour, chairman of the Illinois advisory committee. They were intended mainly to introduce to the public amateurs whose talents and training entitled them to recognition, and the conditions, as prescribed by Mrs Clarke and endorsed by Theodore Thomas, were strictly enforced, only female amateurs of special ability being allowed to participate. No diploma from college or conservatory was either necessary or sufficient; nor was preference given to musical prodigies merely as such, all candidates being rated on merit and not alone for technical proficiency. Professional concerts were also given and of these there were 31, with 14 amateur concerts, all of which were the better enjoyed that they lasted little more than an hour and with a limited number of performers.

At the band-stands and elsewhere out-door concerts were given daily or rather several times a day. Sousa's band was here with more than 50 pieces and with some of the best instrumentalists from the famous marine band of Washington, of which he was for many years the conductor. The Iowa state band was also a favorite, and among other home organizations were Liesegang's Chicago and Brand's Cincinnati bands, both of national repute. During the visit of the infanta Eulalia the Saragossa band gave several concerts in the Manufactures building; there was a Mexican orchestra, composed of some of the leading musicians and composers in the city of Mexico; in the German village was a choice infantry band from Berlin, under the leadership of E. Ruscheweyh, royal musical director, with the cavalry band of the Garde du Corps, of which G. Herold was conductor. In the Austrian



THE COLUMBIAN LIBERTY BELL

village the Imperial band of Vienna, with C. M. Ziehrer at its head, gave daily concerts, and in the Midway plaisance there were acceptable performances, in addition to the discordant music rendered by Bedouin pipe-players, Dahomean gongs, Chinese fiddles, and other ear-piercing instrumentation.

The drama was also represented at the Fair in open air performances, the first one being on the 30th of August, the site selected "the sylvan dell," near the German castle, and the play—*As You Like it*. The stage was erected around the trees, their foliage serving as canopy, with masses of shrubbery for background. Rose Coghlan assumed the part of Rosalind, Otis Skinner of Orlando, and E. J. Henley impersonated the melancholy Jacques. The leading parts were presentably acted, though Miss Coghlan, while full of sprightliness and verve, was altogether too rotund of form and lacking in the delicacy inseparable from this the most delicate of Shakespeare's creations. Especially was this noticed when she appeared in the garb of a boy, with painfully abbreviated tunic and lavish display of plump and tightly hosiered limb. The subordinate characters were feebly interpreted and the supernumeraries awkward and deficient in drill. Nor was the effect improved by the environment of this extemporized theatre; for the voices of the players must compete with the roar of passing trains, the whistle of steamboats, the chime of bells in the German castle, and the tune of "Dixie" vigorously rendered by a Missouri band.

An interesting feature during the last month of the Fair was children's week, when, the price of their admission being reduced to 10 cents, they came to the grounds by hundreds of thousands. For the poor free entrance was provided, many firms and individuals subscribing for from 1,000 to 5,000 tickets, while there were none who wanted for lunch or car fare. The Midway plaisance was the centre of attraction, especially as free rides were given on the Ferris wheel, though the donkey boys did a thriving business and Hagenbeck's menagerie was liberally patronised. The Fisheries, Transportation, and Children's buildings were well attended, as also was the Agricultural building, where the little ones were not slow to learn that biscuits could be had for the asking. It was a merry and somewhat boisterous crowd that filled the grounds of Jackson park, coming early, stopping late, and for the time being taking complete possession of the Fair.



IRVING M. SCOTT

Of the celebrations held by state and foreign participants brief descriptions have been given in connection with their special exhibits; but there were other celebrations of which some mention is here in place, and first among them the 4th of July, when 330,000 visitors passed within the gates, the largest number admitted until, near the close of the Fair, Chicago day exceeded all previous records. It was in truth a cosmopolitan gathering that was then assembled, and never before had the national birthday been honored by so many nations and in so many tongues. Dahomeans were here, their dusky forms attired in red, white, and blue; here were swart visaged Arabs, Soudanese, Egyptians, Algerians, Samoans, Chinamen, Javanese, with men from every state and from all European countries. The buildings and grounds were handsomely decorated, the multi-

colored blending of myriads of flags, the roar of acclaim and salute, the bands and orchestral symphonies, the grewsome melodies of oriental musicians struggling with popular airs, all forming a pageant such as never before had been witnessed on the natal day of the republic.

Toward noon Vice-president Stevenson and his party arrived on the grounds, among those who came with him being the mayor of Chicago and Mrs Perry Stafford, the latter carrying the flag that Paul Jones bore into action, which later she hoisted to the top of the flag-staff nearest Machinery hall. At the stroke of twelve two large standards were unfolded east of the Administration building; on the right of the platform was unfurled the banner of peace, and then was raised an old and well-worn flag with only twelve stars on its field—the original stars and stripes. With the opening strains of "The Star Spangled Banner" thousands of voices joined in chorus, and far across the still lagoons was heard this pæan anthem, even to the triumphal arch where Columbus sat enthroned, as though at an ovation of the people for whom he opened the path to greatness. In the midst of the excitement Mrs Madge M. Wagner touched an electric button which set ringing in the city of Troy the Columbian liberty bell, fashioned in part out of the 250,000 pennies contributed by as many children. The addresses by the vice-president, the mayor, Hampton L. Carson, and J. S. Norton were in the usual vein of fourth of July orations, and long after the close of the ceremonies the audience held informal demonstrations.

Saturday, the 2d of September, was observed by the catholics as educational day, though few children were seen among the vast audience which gathered in Festival hall, the galleries and ground floor being occupied by the clergy, the sisters, and those who had come to hear the speeches and participate in the ceremonies. Archbishop Feehan presided, and on his right was Bishop Spalding, director of ceremonies, in whose charge were the exhibits described in connection with the department of Liberal Arts. The speakers, in addition to the president, were archbishops Hennessy of Dubuque and Ryan of Philadelphia, Judge Morgan J. O'Brien, who told what catholics have done for education in the United States, and Thomas J. Gargan, who spoke of "the patriotism and sequence of catholic education."

On Grand Army day, the 9th of September, about 8,000 veterans took part in the exercises appointed



for the occasion. The parade was marshalled by E. A. Blodgett, commander of the Illinois department, assisted by an efficient staff. Forming outside the Illinois pavilion, the divisions marched through the avenue of state buildings, the First regiment, headed by the Elgin band, acting as escort, followed by the Denver Zouave drum corps, the George H. Thomas post of Chicago, and other detachments from every section of the republic. Proceeding to the Administration building, the men were greeted by the notes of the new liberty bell rung by Alice Scott, daughter of Irving M. Scott of the California commission. Passing thence northward, ranks were broken in front of Festival hall, where a camp-fire meeting was held and brief addresses were delivered, letters of excuse and regret being read from ex-President Harrison, W. Q. Gresham, generals Schofield, Howard, Slocum, Miles, and others whose absence was regretted by their former comrades in arms.

During the last week of October it was estimated that 75,000 odd-fellows took part in the World's Fair celebration of their order, a parade held in Chicago on the 25th including delegations from every state in the



ODDFELLOWS AT THE FAIR

union and from every province in Canada. On the following day the military and civic divisions assembled in Jackson park, and with them came members of the sister order, the daughters of Rebekah. The exercises were held in Festival hall, where shields were placed around the balcony, one over the principal entrance bearing the symbol of the linked chain and the initial letters of the watchwords, "Friendship, Love, and Truth." E. S. Conway, grand master of the jurisdiction of Illinois, was introduced as chairman by W. S. Frost, marshal of the grand lodge of that state. After an overture by the Iowa band, prayer was offered by H. W. Bolton, chaplain-general of the patriarchs militant, and John C. Underwood delivered the opening address, Charles S. Thornton tendering fraternal greeting on behalf of Chicago members, Grand Sire C. T. Campbell of London, Ontario, responding for the sovereign lodge to the chairman's proffer of hospitality, and Past Grand Sire C. P. Sander of New York thanking the jurisdiction of Illinois in the name of the society at large. On this and the following day were held competitive drills and sword exercises in the

Live-stock pavilion, concluding with a dress parade in front of the Government building.

On the 25th of October, or marine day as it was termed, a parade of boats was formed in four divisions, their course being around the wooded island, through the north canal and grand basin, and thence returning to the starting point. They were of many types and represented many nations, forming a novel and interesting spectacle as they glided through the waterways. First came the naval squadron of gigs, dingies, cutters,



TURNERS' DRILL IN LIVE-STOCK PAVILION



launches, and whaleboats, from men of war, from the Viking ship, the caravels, and the New Bedford whaler moored off the grounds. The fisheries division followed, with dories, striker and folding boats, dug-outs, Lofoden island and other fishing boats, Eskimo kiaks, and Dahomean canoes. Next was the transportation squadron, in which were row-boats, canvas and other canoes, gondolas, coast-guard, motor, and life-boats, electric, steam, gas, and naphtha launches, a Norwegian pleasure boat, a Turkish caique, a bicycle boat, and a Ceylonese catamaran. In the last or miscellaneous division were boats of ancient pattern and Indian craft of strange device. In the afternoon there was hornpipe dancing by young girls in sailor garb, and at night a mimic battle in which fireworks took the place of weapons.

Two days later was held a reunion of city officials and prominent citizens gathered by thousands from every state to do honor to the Exposition and themselves to be honored. The exercises were held in the music hall and were followed by a concert at which were rendered the works of Chicago composers. Among other

celebrations which cannot here be described in detail was that of the knights of Pythias, who on the 9th of August assembled in full uniform, led by Grand Chancellor Barnes of Illinois. The 20th of that month, the birthday of Charles Carroll of Carrollton, one of those who signed the declaration of independence, was selected by the Patriotic order of the sons

and daughters of America. A day or two later the Foresters held festivity, and on the 25th, the colored races, with Frederick Douglass as president, met in Festival hall, other days being selected by the Turners' union, the butchers and grocers, and the United Typothetæ of America.

In the Massachusetts building, a few days before the close of the Fair, the chiefs of departments gave a reception to foreign and national commissioners, the Board of Lady Managers, the directors, and other officials. The floral decorations were a feature of the entertainment, the tables and mantels being crowned with roses, the brackets draped with smilax, and every niche and corner filled with palms and ferns. In the upper hall was stationed the Mexican band, and later appeared the Lineff Russian choir, followed by a vocal concert. Supper was served in the Dutch kitchen, and in the centre of the refreshment



LOVING CUP PRESENTED TO THOMAS W. PALMER

table, well stocked for the needs of a thousand guests, was a handsome pyramid of roses.

On the 11th of October the Fair officials invited the foreign commissioners to a banquet held in the music hall, for now the last instalment of debt had been paid, and fitting it was that men should give themselves over to feasting. The entertainment was of a cosmopolitan character and without undue formality, the guests passing between courses from table to table, renewing old friendships and forming new ones. The walls were decorated with the flags of all nations; the music of all nations was rendered by their several bands, while costumes were no less varied, the sombre evening dress of the Anglo-Saxon contrasting strangely with the gorgeous uniform of the oriental and the fantastic headgear of the Corean. The tables were arranged in artistic groupings, curved, crescent, and cruciform, and with a view to avoid all suggestion of favoritism. The sixteen great columns which encircle the hall were entwined with wreaths of oak leaves; the arch at the further end was festooned and garlanded in green, interspersed with roses of every hue, and overhead were electric lights in special designs. In the gallery the fashionable women of Chicago mingled with the wives of foreign commissioners, listening to the speeches, which were many; for it was not until an early morning hour that the last toasts were honored.

To Thomas W. Palmer, as president of the World's Columbian Commission, a farewell banquet was given by his associates, among the guests being the representatives of many states and nations, those who had



helped to make the Fair a success paying tribute to one whose name will ever be associated with what has been not inappropriately termed "the eighth wonder of the world." Introduced by George V. Massey as chairman, the president spoke, as is ever his custom, briefly and to the point. "Without some national body," he said, "the Chicago Fair would have remained a Chicago Fair. I accepted the presidency with considerable trepidation, and had I known what was involved, would probably not have done so; but once in office I felt like a man who had hold of a live wire, and am glad that I did not let go."



GEORGE V. MASSEY

M. H. De Young was the guest of honor at a banquet given to him as director-general of the Midwinter Exposition to be held in San Francisco, and also as second vice-president of the national commission. On the 11th of November a parting feast of which George R. Davis was the chosen recipient, closed a long series of World's Fair entertainments.

Many were the distinguished men and women who visited the Fair, some of royal, some of noble lineage, and others who owed nothing to the accident of birth. First of all was the infanta Maria Eulalia, who came here at the invitation of congress as the guest of the nation and the representative of Spanish royalty, accompanied by her husband the prince Antonio. Several of her visits to the Fair were made incognito; for when known, they never failed to attract a crowd, the 8th of June, a day set apart to do her honor, bringing to the gates 169,000 visitors, by far the largest attendance so far recorded. Escorted to the grounds by a troop of the Chicago hussars, she was received by officials with the utmost deference and met with every possible attention. But the infanta preferred rather to go her own way and see the White

City for herself, as inclination prompted. After making a tour of the grounds, breakfasting at the Administration building, sipping tea in the Cingalese pavilion, and holding a reception in the assembly room, she dismissed her carriage and escort, and passing forth unnoticed from the Woman's building, joined in the throng of sight-seers, remaining for the illuminations and the fireworks, of which there was a brilliant display. On another occasion she inspected the ruins of the cliff-dwellings and the Columbian relics in the convent of La Rabida; witnessed an Indian war-dance, and enjoyed a trip on the intramural railroad; but her favorite resort was the Horticultural building, in which her country appears to excellent advantage. At her last visit she took luncheon at the Pickwick club-room of the White Horse inn, where the attendance of a pompous English butler, his massive calves encased in black silk stockings, did not enhance the enjoyment of the feast. Returning to New York by way of Niagara, a few days later she set sail homeward, bearing with her the good wishes of a people of whom, as she said, she would ever cherish the most pleasant remembrances.

Archduke Ferdinand, heir apparent to the throne of Austria was among the pilgrims of the Fair, though few at the time were aware of it; for he came merely as a visitor and avoided all publicity. So with Duke Alexander, cousin to the czar, whose name appeared on the hotel register as Lieutenant Romanoff. Among other royal visitors was the sultan of Johore, the exhibits from which country, especially in the Agricultural building, were somewhat of a surprise. From India came several of her native rulers, of whom Jajat Jit Singh, maharajah of Kapurthala, aroused the most interest. He was a man of imposing presence, nearly six feet in height, and except for his turban, dressed in faultless modern costume, speaking several European languages, and well informed on the questions of the day. His main object, he said, was to study the latest inventions, especially in electrical appliances, and these he inspected thoroughly, spending most of his time at the Fair. Another Indian potentate was the rawab of Rampur with his suite, the party visiting the Exposition while making a tour of the world by way of China, Japan, and San Francisco.

Of the visits of the lord-mayor of Dublin, the earl of Aberdeen, and other eminent personages, mention has been made elsewhere in this work. To the mayor a public reception was given by the city council of Chicago, and the earl was received by the director-general, in whose parlors assembled a number of officials and chiefs of departments, with several of the lady managers. Benjamin Harrison with his party, among them was Senator Morrill, was the guest of Thomas W. Palmer; but his visits to the Fair were of an informal character. To Secretary Carlisle and Governor West of Utah was given in the Kentucky building an orthodox Kentuckian feast. Cornelius Vanderbilt and his sons arrived in their private car, which served them also as a hotel. Among men of science was Thomas A. Edison, whose inventions have been displayed at every international and scientific exposition held within the last score of years. He came unheralded, avoiding all notoriety, and of his coming only a few of his intimate friends were informed. From France as guests of the society of American engineers, came forty of her most eminent men in that profession, and with them the sculptor Bartholdi, other men of science, art, and letters arriving by hundreds and thousands; for as Edison observed, "no one who made his living by his intellect could afford to stop away from it."

True there was a reverse side to the glories of the Fair, but on this in these closing lines I need not dwell. Among the visitors was a small but demonstrative contingent which seemed to have come to Chicago for no other purpose than to complain, men and women to whom the colossal grandeur



THE INFANTA EULALIA

of a display contributed by all the nations of earth was as nothing compared with the imperfect cooking of a meal. But of these narrow souls there were not many; for with rare exceptions all minor drawbacks were lost in a sense of gratitude and admiration, the young that they had witnessed a spectacle the like of which they had never looked upon before, and the old that they had lived to see it. If among the former not a few returned to farm or village life dissatisfied with its simplicity, this was not the fault of the Fair, nor to such a feeling should its object lessons have inclined. Here youth and manhood were not only educated, but conducted around the world, while to womanhood was for the first time revealed the full scope and dignity of her mission. "No man," said Chauncey M. Depew, "can visit the Exposition, go through it, stay in it, and stay with it, without becoming a broader and better man for the remainder of his life."



F. W. PECK, CHAIRMAN OF FINANCE COMMITTEE

To those who created and conducted the Fair, to its national commission, its board of directors, its special boards and committees, its artificers, and its chiefs of departments a parting tribute should be given. Though men of affairs and accustomed to large undertakings, the managers came to their work untried, inexperienced, new to the task, and only was the final result achieved by working together in perfect harmony, loyally and for a common cause. That their counsels were always wise, that their plans were always carried to perfect fruition, they do not pretend to claim; but during the formative period of the Exposition, and even after its completion, they confronted and overcame such obstacles as seldom before obstructed the path of human enterprise. First there was the indifference of foreign nations, of many of the states, and above all the indifference of congress, which gave but grudgingly of its ample store and encumbered its gifts with many a vexatious restriction. As to the financial difficulties they appeared at times insuperable; for, as we have seen, the expense of construction far exceeded the original estimate. But the directors grappled manfully with the problem, as did others who united together for a single purpose, rich and poor alike giving of their substance and their time, each sparing what he could from his abundant or scanty means. That meanwhile their own business interests were suffering was not for a moment thought of; they would stand by the Fair until its gates were closed, and then, as Harlow N. Higinbotham remarked when resigning his presidency, "it was time to make a little bread and butter."

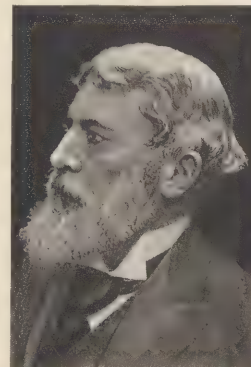
No wonder that in such a spirit the gravest of monetary problems were solved, that funds were poured forth with lavish hand to complete and decorate the buildings and grounds, to arouse the dormant interests of states and nations, and to secure for each department a choice and comprehensive collection of exhibits. Quickly sped the three long years of preparation that preceded the opening day, each crowded with events of surpassing interest, and each forgotten as soon as passed. Through financial and other difficulties, through a winter of extreme severity, through the stormy months of a backward spring, the directors remained at their post, until in the finished fabric of the Fair they presented to the world results which disarmed all criticism and silenced even the voice of envy. Then they invited the people of the world to come and see

for themselves what had been accomplished by this one of the youngest among American cities of metropolitan rank. And the people came, returning home with eloquent stories of the wondrous spectacle, so that there were none who again would ask as heretofore, "where and what is Chicago?"

The Columbian Exposition has fulfilled its purpose; its mission is ended; its exhibits scattered to the four quarters of the earth, and its buildings vanished into air. While foreign nations played well their part, the credit belongs above all to the United States and especially to its western metropolis. That Chicago, which had ever been considered the embodiment of the material, should appear as the highest embodiment of the ideal; that a city noted mainly as the incarnation of the eager, restless, spirit of a commercial age, a city which, destroyed in a night, sprang almost as suddenly into yet more forceful life, surpassing all rivals, but, as was thought,

molding itself only into forms that tended to the growth of riches, to the development of business prosperity; that such a community should blossom forth at once into the ripest fruits of culture, presenting to the world the priceless heirlooms of the past, the grandest results and ideals of the present; this is what made Chicago more of a wonder than the fairy-land of her creation, giving to her the crown of victory, as to one who has nobly repaid a nation's trust.

Elsewhere has been described from its inception the project of the Fair, the worthy ambition which inspired it, the skill with which it was planned, the liberal



W. FEARN, FOREIGN AFFAIRS



DIRECTOR C. H. SCHWAB



DIRECTOR DE WITT C. CREGIER





C. L. HUTCHINSON, CHAIRMAN OF FINE ARTS COMMITTEE

ling or for sojourning in their midst.

Nor should we forget the part that woman has played, the countless evidences of an enlightened and progressive womanhood, showing that of such women there are now a hundred where in former ages there was one. Of this none can doubt who examined the collections in the Woman's building, in the hall of Manufactures and Liberal Arts, where many of the articles were fashioned by female hands, while even in the palace of Fine Arts women were largely represented. If here and there were exhibits which spoke of "fingers weary and worn," of eyes which saw no sunlight, of cheeks pallid with confinement in dreary and crowded workshops, such emblems of bondage were rare as compared with numberless products in all degrees of beauty and utility, coming from woman as an exponent of the freedom and equality of the age. In this, as in other respects, the Fair has



H. O. EDMUNDS, SECRETARY OF THE EXPOSITION

been to the world a revelation, to Americans an inspiration.

It has shown, as no written or spoken words could show, the power and progress of a nation where all are free to strive for the highest rewards that energy and talent can win. In this the heroic age of industrial development, in these closing years of the nineteenth century, it has presented to the world, as in a mirror, the highest achievements of which mankind is capable. Its future influence none can measure or foretell. This only we know, that it will live; will live not only as a memory, but as a stepping stone to greater and nobler efforts, to be compensated with yet richer and more abundant fruits.

WORLD'S FAIR MISCELLANY.—Immediately after the close of the Fair there was held in the Art institute, under the auspices of the Chicago Horticultural society, a floral display, especially of chrysanthemums, with a distribution of several thousand dollars in cash prizes, in addition to medals, one of the features being a competitive exhibition of designs for table and other decorations

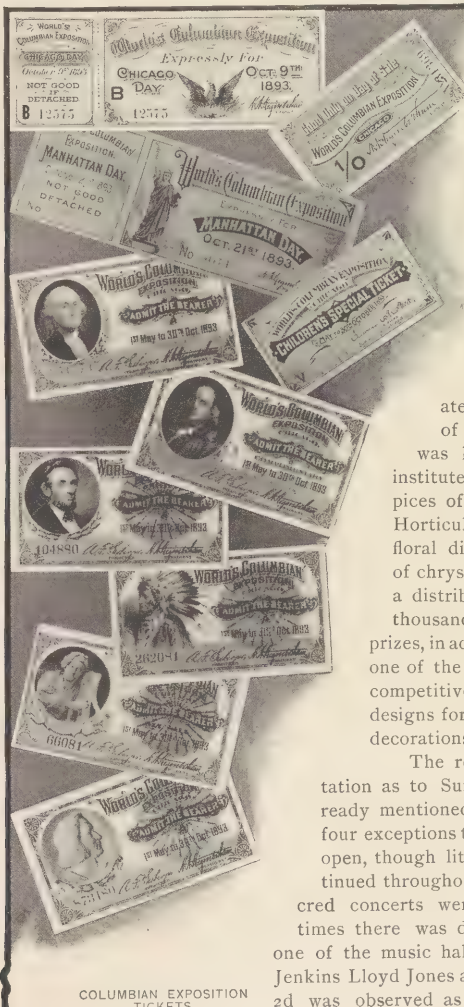
The result of the agitation as to Sunday closing, already mentioned, was that with four exceptions the Fair was kept open, though litigation was continued throughout its term. Sacred concerts were given, and at times there was divine service in one of the music halls, conducted by Jenkins Lloyd Jones and others. July 2d was observed as "patriotic Sun-

day," when there were special exercises in Festival hall, with a reunion of army and navy men.

At the head of the department of admissions was Horace Tucker, for many years freight agent of the Illinois Central railroad, Captain De Remer being appointed chief inspector. By the latter a force of 550 ticket sellers and takers was organized, drilled, and uniformed by the 1st of May, and so perfect was the system that less than 200 errors were found among all the millions of tickets issued. As to pilfering \$100 would more than cover the amount that was detected, 90 per cent even of the change carelessly left at the ticket booths being returned on application. There were in all 182 ticket windows, 97 ticket booths, 326 turnstiles, and 172 exit gates, thus avoiding the possibility of serious delay, no matter how large the crowd.

Long before the opening of the Fair, its managers were besieged with applications for season tickets, less for actual use than as souvenirs. These were printed in four different designs by the American Bank Note company of New York. On the face was inscribed in scroll work at the top "World's Columbian Exposition, Chicago;" beneath this the words "Admit the Bearer" and the dates between which the ticket was available. On the left was the portrait of Columbus, Washington, Lincoln, or of an Indian chief, and at the foot were the signatures of A. F. Seiberger and H. N. Higinbotham. About 60,000 passes were issued, most of them to exhibitors, concessionaires, and members of the press, the total number of admissions by pass, including return checks, exceeding 6,000,000.

Near the Service building was a police station, with an entrance from Stony Island avenue. Several hundred experienced detectives



COLUMBIAN EXPOSITION TICKETS



JOHN BONFIELD

tem of records and reports. During the first seven weeks of the Fair 550 articles were recovered of every conceivable description, from umbrellas to diamond rings and purses well stored with greenbacks.

In connection with the police service was the fire department, with Edward Murphy as chief, the efficiency of which I have



EDWARD MURPHY

already had occasion to notice. There were six circuits to each system and the two were conducted on parallel lines, most of the alarm boxes being placed on one side of the principal buildings, and the police boxes on the other. There was also a supplementary system which connected the central stations with all the police and fire stations on the grounds. There were two telephone systems, one a branch of the Chicago City Telephone company, and the other under control of the Exposition authorities, its service limited to communication within the park.

Adjoining the service building was the medical bureau and emergency hospital, of which John E. Owens was in charge, with resident and attending physicians, a staff of trained nurses, and all appliances for immediate relief, the hospital not being intended as a place for continuous treatment. Patients were of course retained until they were in a condition to be removed; but were so effectively treated that most of them were taken to their homes before nightfall. During the first weeks of the Fair few seats were provided, and on a single day nearly 200 cases occurred of prostration from fatigue and other causes. As the crowds increased and the hot weather came, the physicians found no lack of occupation; but doctors and nurses were always at hand, dividing the watches between them, day and



JOHN E. OWENS

night. The following excellent advice to visitors from Doctor Hillmantel applies to all gatherings of sight-seers. "Come to the Fair early; avoid exposure to the sun; keep quiet during the heat of the day, and on hot days explore only a limited area. Don't loiter or saunter, but move rapidly from point to point; when examining an exhibit stand still and take it in with the eyes and

were stationed on the grounds under the direction of John Bonfield as chief; for the White City was a Mecca for thieves as well as for honest folk. The secret service force was composed of expert thief-takers from all parts of the United States and even from European countries. Those who were identified as thieves were shown to the officers and thereafter forbidden to enter the gates. They were also brought before the members of the city police, and thus a brand was placed on such of the fraternity as intended to make Chicago the sphere of their operations. A lost and found department was included in the secret service bureau, with an elaborate system

not with the feet; for nothing is more fatiguing than the constant shifting of the body's weight from one foot to another. Eat when you are hungry, without waiting for meal time, and eat all you can. Be cheerful; keep your temper, and don't find fault. Don't take children too far around the grounds, and place in roller chairs or leave at home the very aged and infirm."

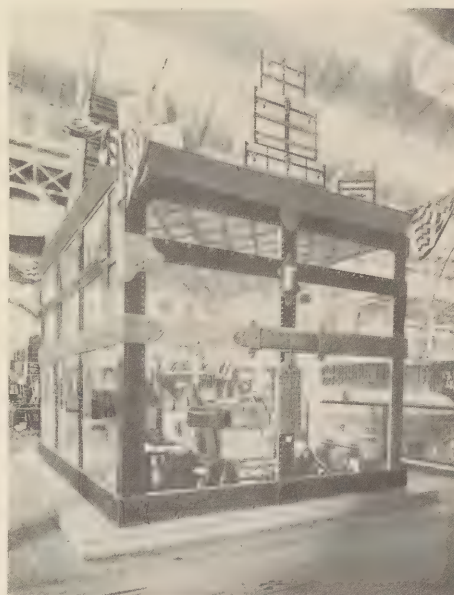
For catering the largest concession was granted to the Wellington Hotel company, by which were opened numerous places of refreshment, supplied from a large building in the southwest corner of the grounds. In the store-rooms were kept many hundred carcasses of beeves and sheep, with fish and fowl to correspond. In the cooking ranges, 120 feet in length, 30 huge roasts of beef and 50 turkeys could be cooked at a time, and the daily baking of bread was 40,000 loaves, while of sandwiches an unknown quantity was prepared for more than 40 lunch counters.

It was estimated that 18,000,000 passengers were carried on the trains of the Illinois Central railroad between May 1st and October 30th, express trains, with cars specially constructed for the purpose, starting from the lake front in Chicago at intervals of three minutes, and making the trip in a quarter of an hour or less. The largest traffic was on Chicago day, when 541,312 passengers were carried on 1,095 trains, something unprecedented in railroad service. During these six months no casualties occurred through the fault of the company's officials and only four or five in all. The elevated railway and the lake steamers were also favorite modes of travel, and the cable roads carried large numbers. Then there were vehicles of all descriptions from tally-hos to tradesmen's wagons.

No light or pleasant task was that of the committee on awards, and especially of John B. Thacher, chairman of the executive branch. Many were the protests against what was termed the single judges system, though as a fact several judges might be appointed if necessary, and each written report recommending that an award be granted must be submitted for approval to the proper department committee, with right of appeal to a special court. Awards were granted for all classes of exhibits from locomotives to travelling trunks, of which latter it may here be remarked that those of American manufacture were most in favor and received the largest number of medals.



H. H. HOLCOMB, CHIEF OF TRANSPORTATION



PRIZE EXHIBIT OF TRUNKS





## CHAPTER THE TWENTY-EIGHTH

### THE CALIFORNIA MIDWINTER INTERNATIONAL EXPOSITION



TO describe in these pages the California Midwinter Exposition was no part of my purpose when I took upon myself the task of writing *The Book of the Fair*; nor could it have been so; for at the time no such project was undertaken or even entertained. But here is an outcome of the Columbian Exposition without which a description of the latter could not be considered as complete; for not only were the best exhibits from the Pacific coast transferred with many additions to their winter quarters, but here also are not a few of the most attractive features in the Midway plaisance and in other portions of the great entertainment at Jackson park. Two unsuccessful efforts had before been made to place California more prominently before the nations; but here was an opportunity such as never before had occurred, and might not occur again for at least a score of years. While by no means a mere imitation of its predecessor, and with much that is novel and original, it may be said that as a purely original enterprise the Midwinter Fair could not have been opened for ten times its actual cost and probably could never have been opened at all.

Early in the season of the Chicago Fair a wish was expressed by many of the exhibitors that another international exposition could be held somewhere within the limits of the United States, but one on a smaller scale and more select in character. To make even a superficial examination of the collections housed in Jackson park was the task of several weeks, and to examine them critically and in detail the entire six months' term would not have sufficed. Under such conditions only the most striking exhibits found favor with the majority of sight-seers, while even the best appeared at a disadvantage amid all these acres of floor space, and of many the effect was marred by juxtaposition with others of inferior quality. Here was the main drawback to the Columbian display, its only serious drawback; so that men said as Edward Everett Hale remarked of the Vienna Exposition: "If this be a specimen of the world; then one wants a museum which shall be a specimen of the Exposition."

Among others to whom the project commended itself was Michael H. de Young, vice-president of the

Columbian commission, one of the California commissioners to Paris in 1889, and thus a man of experience in the affairs of international expositions. Why not hold such a fair in San Francisco, one that should open in midwinter and be known as the Midwinter Fair? Here would at least be a novel display, and one whose attractions would be increased by its environment, especially to those who came from afar to see it; for in winter the golden state is attired in robes of emerald, a covering of verdure taking the place of snow, and at no season of the year does the climate appear to such advantage. Another incentive was that although the Californian exhibits at Jackson park, in common with those of other sections of the coast, were a source of general admiration and surprise, to Californians themselves they were a disappointment; for, as was thought, they did not adequately represent the resources and achievements of the community. As compared with less favored regions California was little known; her changed conditions were little understood; and to make her known, to place her in the rank to which she was entitled among the sisterhood of states, was the main object of the Midwinter Exposition.

To a few of the more prominent Californians then sojourning in Chicago De Young explained his plans, with the benefits that would result therefrom, and on the 1st of June the announcement was made that an



THE COURT OF HONOR

international fair would be opened in San Francisco a few weeks after the close of the Columbian Exposition. At first it was received as a joke, or at least as a rash and ill-advised project, one for which the time was too short, for which no state, municipal, or government aid could be expected, and that must be achieved, if achievement were possible, entirely through the private subscriptions of a community overtaken by severe and protracted business depression. No wonder that with these drawbacks, and coming as it did immediately after the most imposing display of industries and arts that the world had ever witnessed, moneyed men regarded the scheme with disfavor.

But the projectors were thoroughly in earnest; nor was it from moneyed men but from the people that they expected to raise the necessary means; for this was to be a people's fair, an enterprise in which all might join, in which all might feel a worthy pride, as the first undertaking of its kind that had ever been attempted on the Pacific coast. At a second meeting, held in Chicago on the 11th of June, \$41,500 was subscribed as a nucleus for the Exposition fund, and a few days later 4,400 exhibitors at the Columbian Fair had promised as



many exhibits, only those of superior quality being accepted. If at first the wealthier citizens of San Francisco were somewhat lukewarm in their support, this feeling was presently overcome as meetings were held, subscriptions came pouring in, and it was seen that the public had taken hold of the matter with the enthusiasm characteristic of Californians. Before the close of August there was sufficient money on hand to insure the success of the project; congress gave to it official sanction, and meanwhile a permanent organization had been effected, with De Young as president and director-general, Irwin C. Stump as vice-president, P. N. Lilienthal as treasurer, and as secretary, Alexander Badlam, other members of the executive committee being Colonel A. Andrews and Robert B. Mitchell, all citizens of San Francisco. To these were later added Eugene J. Gregory of Sacramento, J. E. Slauson of Los Angeles, Felton G. Berry of Fresno, and Jacob H. Neff of Colfax. There was also a finance committee, of which W. H. L. Barnes was chairman, with Herman Shainwald as manager, and by both excellent work was accomplished, no effort being spared to secure such a fair as would be a credit to California, to the Pacific coast, and especially to the city by the Golden Gate.

The site selected was in Golden Gate park, which a score of years ago was little more than a wilderness of sand-dunes, and is now the pride of the home-loving San Franciscan, its spacious avenues lined with trees and its grass-planted surface covered in part with shrubbery, with acres of lawn, and flower-beds filled with semi-tropical plants. Extending from the shore of ocean to within somewhat less than a league from the business quarter of the city, and with a surface of more than 1,000 acres, it is reached by several lines of cable cars running at from three to five minute intervals. Near the centre is "Concert valley," at the time unreclaimed but intended later as a permanent location for the purpose which its name implies. This was the chosen spot, its area with additions as afterward needed amounting in all to more than 160 acres; for applications for space were far in excess of the original estimate. No great expense for grading was needed, nor any large outlay for landscape decoration, since in the park itself were all the elements of the picturesque. At one end of the site is Strawberry hill, forming the background of the vista, on its crest an observatory and beneath it an artificial lake. Here, under the shadow of the hill, within sight and sound of the Pacific, the dedication ceremonies were held on the 24th of August in the presence of 60,000 people, by each and all of whom it was hoped that the event would mark a new epoch in the history of California.



BONET'S ELECTRIC TOWER

Not least among the wonders of the Columbian Exposition was the speed with which its structures were erected; but as to those of the Midwinter Fair it may be said that, like the city which contains them, they sprang up almost in a night. It was not until late in September that the contracts for the first buildings were awarded, and yet at the formal opening on the 27th of January, a space of about four months, all the principal and most of the minor pavilions were practically completed. While none of them rival the magnificent proportions of the Columbian temples, there are many whose skilful composition and beauty of design leave nothing to be desired. The larger edifices, five in number, are mainly of oriental type, built around the grand court, or court of honor, in Concert valley, and approached by a series of stairways and terraces. Giving further emphasis to the architectural scheme is the Bonet electric tower in the centre, an iron structure, 266 feet high and of symmetric outline. In this group of edifices utility has nowhere been sacrificed to mere display, nor is there undue striving after effect; but rather a just adaptation of parts, an interdependence one on another, and of all on the landscape setting. There is nothing gaudy about them, and there is nothing of incongruity. The coloring is subdued; the façades are substantial, staff-covered, and somewhat heavy in outline; the windows arched and deep-set, the roofs low, red-tiled, and surmounted with domes of blue or gilded pinnacles and kiosks, while shady loggias and arcades recall to mind the mission days of Franciscan padres. Whether considered

apart or as a single architectural composition with harmonious blending of device, the buildings are a credit to their artificers, and the more so that their plan is original, so far at least as originality consists in the adaptation of ancient methods to modern conditions.

In the decoration of the grounds, and especially of the central court, it was intended to give to them in part a semi-tropical appearance, and for this purpose everything was at command; for the park commissioners placed at the disposal of the landscape gardeners thousands of trees and plants, while generous contributions were received from every portion of the state. Palms are everywhere, rising from terraces and lawns, from towers and roof gardens, from the fronts of buildings and the borders of avenues. Almost side by side with the floral wealth of California and of eastern climes are the flowers and shrubbery of southern Europe, of India, Australia, New Zealand, the Sandwich islands, and Japan, the specimens changed with the changing seasons and at all seasons loading the air with perfume and presenting a brilliant array of living color. At the head of the court is a fountain, with figures symbolic of California, and from an electric fountain at the opposite end countless jets of water rise to a height of 100 feet in wondrous shapes and in every hue of the rainbow. Elsewhere are the colossal statues of Columbus and Isabella, familiar to all pilgrims of the Columbian Fair. Surrounding the plaza is a spacious roadway, its centre macadamized and its sides forming polished walks of bitumen, within which are open spaces where thousands may stroll or linger without overcrowding.

Passing into the court from the principal entrance, the visitor finds himself in front of the Manufactures building, and here, if it be his first visit, he will tarry for a moment to view in their entirety the leading features of the Fair. Through the mist and spray of the fountain at the further end is seen the Administration building; on the right are the palace of Fine Arts and the hall of Horticulture and Agriculture; on the left the temple of Mechanical Arts, these with a few minor structures forming the architectural environment. From the roofs of the various buildings and from flagstuffs around the court are displayed the banners of all nations, while walls of ivory white relieved with more brilliant hues, gilded spires, and sombre tinted domes and cupolas, all contrasting with the rich green foliage, afford a striking combination of colors. Eastward is the harbor of San Francisco, flanked by a range of purple hills, with Mount Tamalpais keeping guard over the Golden Gate, beyond which are the blue waters of the Pacific.



LOOKING NORTH FROM THE ELECTRIC TOWER



As in the Columbian Exposition, the largest structure is the hall of Manufactures and Liberal Arts, planned by A. Page Brown after the Moorish style of architecture, the building with its annex and galleries having a floor space of 177,000 square feet. At each of the corners is a pavilion surmounted by a cupola 50 feet high, those that front on the central court being connected by a deeply recessed arcade, in the centre of which is the principal entrance, above it a lofty dome painted in turquoise blue and capped with a lantern finished in gold. Here is the point of architectural emphasis, the design being further relieved from monotony

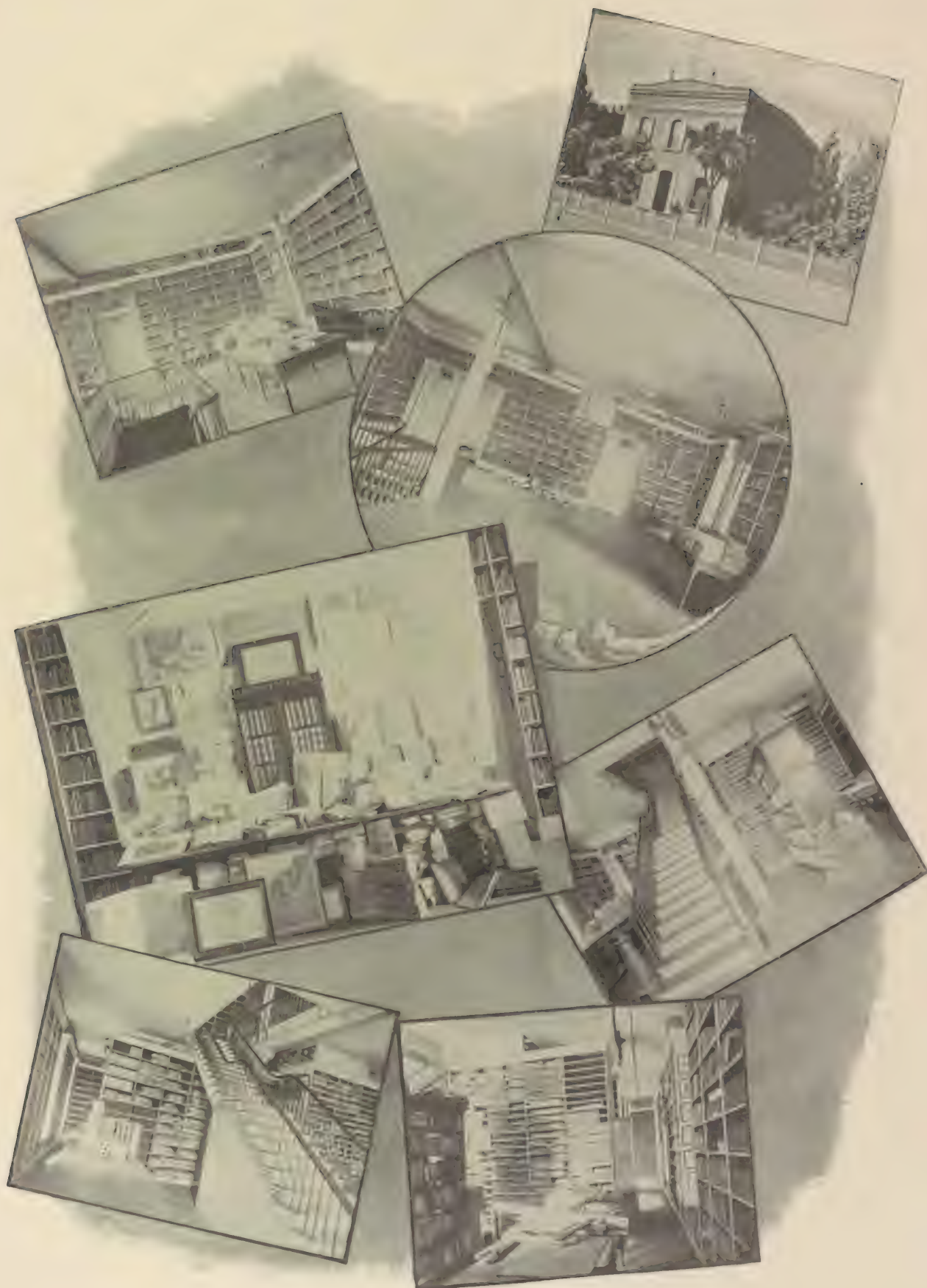


MANUFACTURES AND LIBERAL ARTS BUILDING

by figures symbolical of the arts and sciences, by gilded minarets, and by the flags and coats of arms of all the states and nations represented within, these extending the entire length of the cornices. The roof is of glass and dark red Spanish tiles, an upper gallery opening into a roof garden planted with fuchsias, palms, chrysanthemums, and the out-door plants which thrive in the mild California winter. In the interior, spacious aisles intersected by a central nave divide the groups of exhibits, among which is much that was best worth preserving in the temples of Jackson park.

The exhibits, of which Frank McCoppin is in charge, are arranged in three divisions—Manufactures, Liberal Arts, and Ethnology and Archæology, the last including such as relate to the progress of labor and invention. In the department of Manufactures are nearly all the classes contained at the Columbian Exposition, with others which there were displayed in separate buildings. Under the heading of Liberal Arts are education, literature, engineering, public works, music, and the drama, with government and law, commerce and banking, social, religious, industrial, and coöperative organizations. In the third section are presented models and views of ancient monuments, cities, and habitations; the furniture, clothing, implements, and weapons of aboriginal races; inventions, and statues and portraits of inventors; objects which illustrate progress in the conditions of life and labor, with many additional classes and countless subdivisions grouped on floor and gallery; for within these walls are represented thirty-eight nationalities, including nearly all the great nations of Europe, Asia, and America, with many of their dependencies.

Education is a strong feature in the department of Liberal Arts, the exhibits of the university of California occupying the entire northern gallery, and including the display of the Lick observatory at Mount Hamilton. Colleges and schools both private and denominational are freely represented, while from the East, Harvard, Yale, and the Johns Hopkins university contribute much that is of interest. Libraries have also their place,



THE BANCROFT LIBRARY



and in this connection may be mentioned the one from which were collated the materials for my historical and biographical works exhibited at the Fair, together with most of the historical matter inserted in the story of the Columbian Exposition, so far at least as it relates to the Pacific coast.

The Bancroft library is of its kind probably the most unique collection extant. It consists of some 60,000 books, maps, and manuscripts relating in whole or in part to the affairs of western North America, social, industrial, and political. Among them are found in richest abundance details of the discovery of the several parts of this vast domain, equivalent in area to one twelfth of the earth's surface, and the settlement and early occupation of the same. The exuberant and varied resources of this region, which embraces all the latitudes and climates of the northern hemisphere, can here be traced as in an open book; agricultural and mineral lands, their possibilities and yield; what commerce and manufactures have done; favorable and adverse influences of combined capital and combined labor; influence of the several religions and also of secret and other societies; the organization and evolution of governments and political science; in short, there is in this library ample material for the study of man, aboriginal and civilized, in all the requirements and conditions of life.

Nearly half a century of time and over half a million of dollars were consumed in making this collection. First, all the nooks and corners of North and Central and South America and the West India islands were searched for whatever had been written or printed therein, and whatever related to them which had been elsewhere published. Then Europe was several times visited in like manner; and in numberless instances where the desired books and manuscripts could not be purchased, copies were made. Work of this kind was done in all the great libraries of England, France, and Germany, of Italy and Spain. Everything in St Petersburg relating to Alaska was translated and copied, the archives of Alaska, which were sent from Sitka to the office of the secretary of state in Washington, being transcribed as needed in full or in part by able translators and collators. In the libraries of the British museum, the London Geographical society, and others in England was found much rich material on the history of the Northwest coast during the fur-hunting epoch and the subsequent settlement of British Columbia and Oregon by English-speaking people. The archives of Spain and Mexico supplied masses of historic data relating to the conquest and occupation of Spanish America, while chronicles of the doings of Anglo-Americans on the western slope were secured in the older settled sections of the eastern side.

When all that could be purchased on the subject—that is to say the history of western North America—was thus brought together from every quarter, and all desirable material that could not be purchased

had been copied at a labor and expense never before approximated in the forming of great libraries, there still remained many historical gaps which could not be filled from any existing source. Then was devised a plan for gathering still further historical data relating to the early affairs of the several commonwealths, such as never before has been applied to any extensive effort of the kind. Corps of literary laborers, under competent leadership, were sent out in various directions to obtain and write from the mouths of living witnesses their own experiences. All the more prominent pioneers, and those who had taken an important part in making history were thus visited, and what they had seen and done was placed in imperishable form.

Hundreds of original manuscripts, of priceless value and of the utmost importance, were thus brought into existence and made a part of the Bancroft library. Among them were the narratives of the Hudson's Bay company's chief factors and chief traders; of Alaskan officials under Russian régime; of the trappers and traders of the northwestern interior, the adventurous missionaries and overland emigrants to Oregon and California during the forties, before gold in the Sierra foothills was thought of; the padres and mission-builders who came from Mexico and Lower California, leaving a line of Franciscan missionary stations from San Diego to San



ADMINISTRATION BUILDING



THE PALACE OF FINE ARTS



AMONG THE STATUARY GROUPS



Francisco bay; the old Spanish families long resident in San Diego, Los Angeles, and Santa Barbara; Marshall, Sutter, and the great gold discovery which revolutionized the financial world; the miners, the great agriculturists, and the railroad builders; the merchants, bankers, and manufacturers, with scores of others who contributed of their experiences to the general storehouse of knowledge in the form of manuscript histories or of shorter dictations.

Years of time and scores of secretaries were occupied in this work, during the progress of which Alaska was twice visited, and half a dozen journeys made to Mexico, with repeated tours of the entire territory to be covered. From the mission and family archives of southern California many thousands of important original papers and documents were secured, arranged, and bound in bulky quartos. Wagon loads of costly books and manuscripts were acquired at public and private sales of libraries, such as the Andrade collection destined for Maximilian's Imperial library of Mexico, but which at his death was shipped to Europe. Then there were the Pinart collection, the Ramirez collection, the Squier library, and fifty others. Of the 300 volumes of San



A GALLERY OF OIL PAINTINGS

Francisco mission archives, consisting of papers relating to Mexican land grants, gathered from all the pueblos and missions of California into the United States surveyor-general's office, there to be used in the adjudication of claims, an abstract was made, occupying a dozen Spanish copyists. The archiepiscopal archives were transcribed in like manner, this long, tedious, and expensive method being the only way in which the historical data contained in these invaluable collections could be brought into and made part of the Bancroft library.

A hundred like incidents illustrating the ways and means of this ingathering might be presented; but with the facts here given the reader is able to comprehend what otherwise might seem to him an exaggeration; namely, that this library is the largest collection of books and manuscripts in the world bearing on a single topic, if we may consider the history of a given area as a topic; that it is the largest collection of American history in the world; that no state or nation now in existence, or which ever had existence, has or ever can have as full and complete data concerning its early history as this collection gives to western North America; that with easily obtainable eastern data added, and the collection kept up in the future as it has been in the past, it is not possible for any individual state or nation, no matter at what expenditure of time and money, to create another library of American history which shall equal or even approach it, for the obvious

reason that, were the men and means at hand, the time has passed when it is possible to accomplish the pioneer work which gives to this one its exceptional value.

By the artificer of the Manufactures building was also designed the hall of Administration, which, as at the Columbian Exposition, is considered one of the architectural gems of the Fair. It is of moderate size and of graceful proportions, its light and symmetric outlines accentuated by a spacious dome surmounting a central rotunda, and with pavilions at each of the corners, broad stairways and terraces giving further emphasis to this chaste and dignified composition. In style it is oriental, the body of the structure resembling somewhat an Indian pagoda, while in the main entrance, deeply vaulted, and in the mural decorations are traces of Moorish treatment. The interior of the dome is handsomely decorated, and on the outer surface are figures in relief, the light which streams from the tall windows beneath imparting a cathedral-like effect. Within are no exhibits, the various chambers being occupied by the managers, the foreign department, the bureau of information, and as headquarters for the press.

The palace of Fine Arts, erected by C. C. McDougall, with John A. Stanton in charge of its contents, is a modest structure of Egyptian type, constructed of brick and stone and intended as a permanent edifice. The exterior is adorned with palm and lotus leaves, with Egyptian and Assyrian deities carved in low relief, and the friezes are richly ornamented, the decorative scheme being fully in keeping with the architectural design. Set back some forty feet from the roadway and slightly raised above its level, the effect is further increased by a spacious vestibule guarded by sphinxes, and with floor of mosaic laid in Egyptian figures. Flanking



A SECTION OF THE HORTICULTURAL AND AGRICULTURAL BUILDING

the portico are massive columns supporting a gallery, whence pillars extend to the entablature, above which is a triangular crown. The interior is in keeping with the external aspect, the friezes, wainscotings, and staircases grotesque with conventional emblems, with heads of beast and bird. While to the building as a building no exception can be taken, an exhibition of modern art would appear somewhat out of place in this Egyptian temple, with its pyramidal roof and walls as yellow as the sands of Nile.

In the central hall is most of the statuary, the chambers adjoining being mainly devoted to water colors, and the oil paintings contained in the five compartments of the annex. All branches of art are included in the display and among the works are many from artists of repute in all the principal nations represented at the Columbian Exposition, some of them still alive and some who live only in their canvases. Corot and Daubigny are here, with Jules Dupré, Troyon, Henner, and Claude Monet. Of the Russian school there are Makovsky and others, and from Poland comes almost intact the collection of the society of Polish artists. England, and Canada, Italy, Spain, and Germany also find expression in these galleries. Of American painters there are several who rank among the great masters of their craft, while of the California display it need only be said that it is the best exhibition of local art ever gathered in a single collection.

Horticulture and agriculture are prominent features at the Midwinter Fair, and in these departments are also included dairying, forestry, fisheries, fish products, and pisciculture, with other branches for which no separate structures were provided. For the housing of the various collections a single roomy edifice, designed by Samuel Newsom, with Emory E. Smith as chief of department, was erected in the style of architecture characteristic of the pastoral era, with low, massive walls of dull yellow tint, deeply arched entrances, and shady porticos inviting to repose. A glass covered dome 100 feet in diameter surmounts the central rotunda, and around it are smaller domes, with towers above the principal entrance and over the eastern end. The decorations of the building are more suggestive of its purposes than the building itself; for though an excellent combination of mission architecture, it is filled with products such as were never raised on California soil until long after the missionary era.





MECHANICAL ARTS BUILDING

In the centre of the rotunda is a striking display of fruits from Fresno county, arranged in architectural forms and surrounded by agricultural groups from other counties. In a court adjoining is a classified array of vegetables, with a Ferris wheel constructed of oranges, and in adjacent sections are exhibits of tobacco, of California, Spanish, and Portuguese wines, and of malt and spirituous liquors. Here also are beef extracts and other food products, while from the San Francisco produce exchange comes a choice display of grain. In the southwest wing is a large assortment of dressed meats and agricultural implements, beyond which is a model fish hatchery from Mendocino county. The main floor is covered with avenues of booths and pavilions, interspersed with trees and flowering plants, each exhibitor striving to surpass all others in beauty of design and decoration. On the floors above is an endless display of fruits and flowers and forest growth, including the collections of the state boards of horticulture and sericulture. Here is the most attractive portion of the building, and perhaps of the Fair; for in these galleries the interblending of foliage with floral effects, of stately palms, of ferns and vines and broad-leaved plants, gives to them the aspect, perfume, and color of a spacious and richly stocked conservatory.

The hall of Mechanical Arts, with Edmund R. Swain as its artificer, is fashioned so far as conditions would permit in the style of an Indian temple, its external aspect in contrast with the whirl of machinery, the models of railroads and steamboats, and the electric appliances contained within; nor is the effect improved by the boiler-house in rear, with the smokestacks of its furnaces in close proximity to lofty pinnacles, prayer-towers, and gilded kiosks. Nevertheless it is a pleasing composition, well conceived and skilfully worked out to completion. Its most striking feature is the richly colored entrance-way, in the form of a pavilion with pyramidal roof, and flanked with stately minarets. At the corners are large octagonal towers, the spaces between them and the main portal being pierced with arched openings and the whole exterior aglow with tasteful ornamentation.

Subject to the direction of A. M. Hunt, as chief of department, the groups were classified and arranged under the divisions of machinery; mines, mining, and metallurgy; transportation, railways, vessels, and vehicles; electricity and electrical appliances. In the centre of the main floor, surrounded by a circle of pumps, are two large tanks, into one of which are discharged the waters of a miniature cataract, illumined at night by electric lights. At the southern end are the engines and dynamos which furnish light and power to the buildings; in the western and northeast sections is the lighter machinery, and to the right of the main entrance are the electrical exhibits, including that of the General Electric company, near which is the display of Germany and

France, and across the aisle that of Great Britain. The mining exhibits of California, arranged by counties, occupy a large portion of the main floor, and here is a most elaborate display of the mineral wealth of the state, the list including 35 varieties, of some of which there are countless specimens. In the centre is a large gilded globe resting on a pedestal upheld by granite columns and surmounted by a grizzly bear. In this sphere is illustrated California's total yield of gold, and if made of that metal it would represent a value of \$1,300,000,000.

On a commanding location near the Horticultural building is the home of Southern California, approached from the central court through an avenue lined with orange and palm trees. Erected by the Southern California Midwinter Fair association for the use of several counties, its contents are worthy of what has been termed the Mediterranean region of the Pacific coast, where are raised nearly all the products of Italy, Greece, and Spain. In the centre of the main floor are the exhibits of Los Angeles county, a feature in which is an oriental arch built of oranges and surmounted by an elephant, life-size and fashioned of walnuts. In rear of this is a walnut tower that did duty at the Columbian Exposition, a ton of nuts being used in its construction. On the left is a mammoth ear of corn covered with 45 bushels of grain in the cob; in the foreground is a pyramid of oranges from Pasadena, and behind it a tower of olive oil from Pomona, with tables between these structural groups on which are arranged the citrus fruits of other sections. Dried fruits are also grouped in artistic designs; from prominent vintners and viticulturists come 1,000 bottles of wine, and there is a model farm with orange grove and field of alfalfa, illustrating old fashioned and modern methods of irrigation.

Ventura county has a pagoda of beans in 83 varieties, with a choice array of fruits, almonds, and honey. The exhibits of San Bernardino and Riverside are in keeping with their reputation as among the great citrus belts of the state, the former having also wheat and wine with beet sugar from the Chico factory and mineral specimens from scores of mines, while Riverside, in addition to her Ferris wheel and pyramid of oranges, has peaches, prunes, and apricots, appearing to the best advantage during the term of the Southern citrus fair, opened in this building on the 20th of February. San Diego has her Silver Gate warehouse composed of many varieties of dried fruits and grains, with cereals in sheaf and windows of honey, jellies, and wines. The archway is handsomely decorated in seeds and grains; there are columns of olive oil and lemons, and near by is an abundance of citrus fruits, the interior walls being hung with pampas plumes, photographs, and paintings in oil. There is also a display of mounted animals and birds, and of food fish more than 100 descriptions. In



THE HOME OF SOUTHERN CALIFORNIA



the gallery of the main building are a woman's department and an art exhibit, with parlors, offices, an assembly hall, and committee and reading rooms.

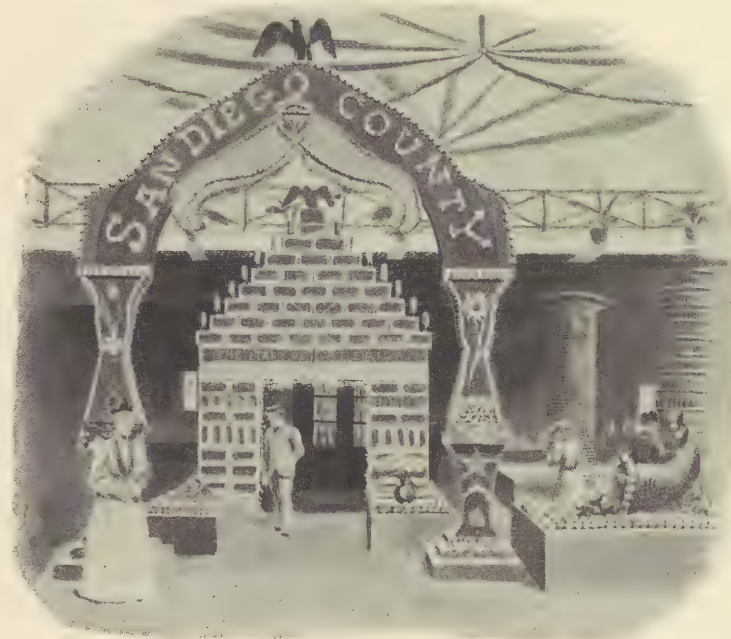
Northern and Central California erected for the housing of their collective exhibits a commodious structure near the Administration building, of no special order of architecture and intended for utility rather than display. The interior is richly decorated with floral embellishments, its contents consisting largely of fruits, grains, and minerals, a feature in which is the exhibit of the Northern citrus fair in competition with that of Southern California. Oranges by tens of thousands are arranged in attractive forms, with other fruits, green, dried, canned, and bottled, and with choice assortments of vegetables. Cereals are also grouped in many devices; in a figure of Ceres, in the form of a woman, and in the shape of a gigantic ear composed of many thousands of ears. And so with wine, of which there is a mammoth bottle fashioned of several hundred bottles, while one of the counties has a fountain flowing with wine. Of manufactures there are excellent samples, and in a word all the leading industries and resources of California, north of the Golden Gate, are here represented; but as these exhibits are culled from eleven counties, they cannot be described in detail.

Several of the counties erected pavilions of their own, first among which may be mentioned that of Alameda, a handsome structure of oriental design and appearing to excellent advantage on its prominent site to the south of the Administration building. In front of the main entrance is a garden of semi-tropical plants; from the gallery is access to a roof garden, and the exhibiting space in the central court is well stocked with the productions of one of the most favored sections of California. Santa Clara displays her wealth of fruits and other products in a neat, rectangular edifice, its towers draped with flags and its cream-white color in

contrast with the surrounding foliage. San Mateo's building is of the mission order, and its contents in keeping with the reputation of that county as a horticultural district. San Joaquin has a tasteful pavilion of cruciform shape, its central dome encircled with a balcony and capped with a graceful cupola. Worthy of note are the floral decorations of its interior, and especially of the main aisle, which is one mass of flowers and plants. Manufactures are the principal feature in the exhibits, though the products of farm, orchard, and vineyard are well represented. Monterey, whose history antedates the landing of the pilgrim fathers, finds expression in one of the quaint farm buildings of a century ago, where, in addition to the fruits of the soil, are relics of mission days. In Santa Barbara's pyramidal structure olives and olive oil are among the principal groups, and in the centre is reproduced the obelisk, framed of oranges, which attracted so much attention at the Columbian Fair. Humboldt erected



LOS ANGELES COUNTY IN THE SOUTHERN CALIFORNIA BUILDING



ANOTHER SECTION OF THE BUILDING

an unpretentious edifice constructed entirely of native woods and stocked with lumber, grain, and fruits. Tulare has, in place of a separate building, a model irrigated farm with growing crops, forming a unique and novel feature among the county exhibits.

The states adjoining California on the north and east have also their separate buildings at the Fair, others being represented chiefly in the main departments. Oregon has a handsome structure in the most populous part of the grounds, well stored with exhibits which, except for semi-tropical fruits, include nearly all the classes displayed by California. Prominence is given to manufactures, in which Oregon rivals her southern sister, though here is sufficient proof, if proof were needed, of her wondrous fertility of soil. Nevada has an edifice of the mission order, the contents of which at once dispel the popular illusion that silver and sagebrush are the principal products of the state. For the first time, outside her own boundaries, Nevada has given adequate expression to her resources, showing that she is rich in the yield of her farms as well as in that of her mines. There are deciduous fruits of many varieties and of excellent quality, while from the floral decorations it will be seen that California is not the only clime "where the Junes and Decembers meet."

Foreign residents of California have shown their interest in the Fair by erecting structures characteristic of their native land. As headquarters for British visitors was built, near the home of San Joaquin county,



THE NORTHERN AND CENTRAL CALIFORNIA BUILDING

"Anne Hathaway's cottage," with thatched roof, projecting gables, and the tiniest of windows, all as in the original at Stratford-on-Avon. It is a quaint and restful piece of architecture, and not inappropriate to the part which it plays at an international exposition; for Shakespeare belongs not to England alone but to all the world. Nestling among the trees and in neighborly proximity is the Canadian domicile, resembling an old-fashioned country house, comfortably furnished and tastefully decorated, its walls hung with portraits of statesmen and with paintings, etchings, and engravings of picturesque and historic scenes. To Servia, Roumania, and Montenegro belongs the largest and most ornate of the national pavilions, with features adopted from the public buildings of all the three, and with strong traces of Russian treatment. The Italian edifice is of classic architecture, a simple structure but handsome in its simplicity, and mainly used for purposes of recreation, for music, dancing, and other pastimes in which Italians delight.





ALAMEDA COUNTY'S PAVILION

In this connection may be mentioned Festival hall, at the western extremity of the grounds, intended for amusements and public gatherings, and with recreation grounds adjacent. It is a rectangular building, with spacious arches and stairways, flat-roofed and surmounted by a glass-covered superstructure. On the main floor is an assembly hall which, with its surrounding galleries, affords seating capacity for 6,000 persons, the stage being 60 feet wide and flanked with tiers of boxes. Elsewhere are the offices of the management, with accommodation for the concessionaires and for the Midwinter Fair guards. Here concerts and other entertainments are given, and by Sousa's, the Iowa, and Exposition bands are open air concerts, the latter

held during inclement weather in the Manufactures or Horticultural buildings. Here also it was at first intended to hold the sessions of the various congresses assembled in the city of San Francisco, the subjects considered including politics, economics, labor, finance, religion, temperance, education, literature, art, and music.

There is no Midway plaisance at the Fair; but scattered throughout the grounds are many things which remind us of this inviting feature in the Columbian Exposition, while of both expositions it may be said that to their supplementary attractions, their Midway spectacles, their music, fireworks, illuminations, and special days of festivity and celebration, was due at least two thirds of the total attendance. At the former there are outside exhibits which found no place at Jackson park, and among the most interesting is the mining camp of '49. It is a typical camp of the olden days, with its row of shanties on either side of the street, its stores, stage office, and hotel, its dance hall, saloon, and gambling resort, with all the adjuncts of pioneer civilization, but with neither church nor school-house. In these days there were no children in California, and as for divine service, it was conducted at times in the saloon, with results much more satisfactory, so far as the collection was concerned, than at the fashionable sanctuary of modern times. Other distinctive features are the Oregon hydraulic mining exhibit and the Colorado gold mine, the latter reproducing in miniature the workings of the Saratoga mine in Gilpin county.

The Chinatown of the Midwinter Fair includes a temple or Joss house, a theatre with its endless performances, a tea house where the beverage is served



WINE PRESS STATUE



IN THE SAN MATEO COUNTY BUILDING

with sweetmeats on square ebony tables, a court redolent with the oppressive odors of Chinese plants, and a number of booths where are gilded carvings, silk-embroidered robes, furniture inlaid with mother-of-pearl, and other manufactures of wondrous design and workmanship. On the opposite side of the central court, enclosed with a bamboo fence, is the Japanese village, with its theatre, acrobats, and dancing girls, its restaurant and tea house, its lake and waterfall and landscape garden. The street in Cairo is here, complete in every detail, though differing in many respects from the one in Jackson park and from the Rue du Caire at Paris in 1889. Within the principal entrance is a bazaar with more than three score booths aglow with jewelled weapons, filagree work, and fabrics warm of hue. Near by are a Turkish café with luxurious appointments, and a restaurant where are served all manner of dishes on tables placed beneath the trees. There are mosques with fantastic domes and stately spires and minarets; there are two theatres, in one of which are performed the sword dance and the repulsive danse du ventre; there are the familiar groups of Arabs, Egyptians, Soudanese, and Nubians; there are camels, donkeys, and donkey boys, and finally there is the wedding procession, resembling the one already described in these pages. In the Hawaiian village, in addition to the cyclorama of the volcano of Kilauea, as represented at the Columbian Exposition, are the throne and uniform of the late king of Hawaii, with the furniture and equipments of his palace, relics of by-gone days, and many forms of native manufacture. Islanders in white flannel suits and island lasses in gay apparel are chatting and sauntering around the plaza, and in front of primitive huts of plaited grass and ferns stalks the gigantic ox "Apalahama," astride of which is a woman with bifurcated skirt of spotted calico. Ceylon has a court and tea garden transplanted from the Chicago Fair, as was also the Dahomean settlement. In the Eskimo village is shown how the natives of Labrador, men, women, children, and dogs, live in their hyperborean clime in cone-shaped huts of snow, so far at least as the effect can be produced by liberal coatings of whitewash. In contrast with this is the Arizona village, whose denizens are skilled in simple forms of manufacture, as in the making of baskets from native grasses so closely woven as to hold water, and in the weaving of blankets on the most antiquated looms, yet rich in color and extremely durable. Their cabins are of mesa grass, with sloping roofs and long gourd chimneys in the shape of an inverted tripod. In another Indian village—that of Doctor White Cloud—are Sioux warriors and squaws, among them several who took part in the battle on the Rosebud, where Custer met his fate.



Europe is also represented in the Midway features of the Fair. There is a German village in which Heidelberg castle, with its store of ancient weapons, pictures, and furniture, looms above peaked and gable-roofed cottages nestling around its base. There are old-fashioned German shops; there are skittles and ten pins, with fun and frolic in every form, and there is the inn of "The Golden Bear," where he who is so inclined may enjoy his beer and pipe in company with the broad-girthed citizens of the Fatherland. Covering some two acres near the Manufactures building is the prater or park, with its shady avenues, fountains, and flower-beds, a miniature reproduction of the site on which was held the Vienna Exposition of 1873. In the concert hall are performances conducted by the musical director of the imperial court of Austria, and on special nights are garden fêtes and other entertainments. A further attraction is the plaintive music of the gypsy chorus in the Hungarian csarda or inn, noted for its excellent wines and repasts.

On the route of the Scenic railway are shifting glimpses of scenery, the line passing through a natural cavern, the walls of which are illuminated with flashes of electric light in various colors. The Firth wheel is to the Midwinter what the Ferris wheel was to the Columbian Exposition, but on a smaller scale, and, as is claimed, with certain improvements in mechanical device. The foundation for the piers is formed of more than 700 tons of rock and cement, and the supports and bearings are capable of withstanding a much greater strain



SUGGESTIONS OF THE MIDWAY PLAISANCE

than any to which they are subjected. The wheel is 100 feet in diameter and 50 additional feet are gained by the height of the foundation and the natural elevation of the site. From the windows of the 16 cars, each holding ten persons, is a kaleidoscopic view of the Fair, and of surpassing beauty is the effect by night when buildings and grounds stand forth in tracery of fire.

In the illumination of the Fair the electric tower is the principal feature; for here is one of the most powerful search-lights in the world, its comet-like rays distinctly visible more than 50 miles at sea. Soon after nightfall the electric fountain begins to play; at a given signal the lamps are extinguished, and an instant later the flash of the search-light is turned on the gilded dome of the Administration building, which hangs like a ball of gold suspended in air, its apparent height increased by the darkness which enshrouds the structure beneath. Then in succession the rays are turned on the pinnacles, towers, and façades of each of the principal edifices, or sweeping the horizon, cast their sheen afar on the waters of the Pacific. Presently the arc and

incandescent lamps are relighted, accentuating as with meridian splendor the graceful proportions of the buildings grouped like enchanted palaces around the central court.

And here in her dazzling robes of light we will take our leave of the Sunset City, the City of Palms, the Midwinter Fair. While other international expositions have been the outcome of years of preparation at a cost running far into the millions, here was what may be termed an impromptu display of what California could do on the briefest notice and with the smallest possible means. Most creditable were the results achieved, and the more so that nothing better than county or local fairs had thus far been attempted. Moreover it was a season of financial straitness; there was no government, state, or other public aid, and by capitalists the project was at first declared to be neither practicable nor desirable. As to the benefits of the Fair, its educational and commercial benefits, its benefits as an advertising medium, an efficacious and dignified advertisement, inviting to the Pacific coast the class of immigration which it needs, as uniting all sections of the coast in fraternal sympathy and friendly coöperation, as bringing them into closer relations with foreign lands and with



ONE OF THE MIDWAY ATTRACTIONS

other portions of their own land, these are influences which cannot as yet be estimated. A quarter of a century hence, let us say, when at San Francisco or Portland a great international exposition shall be held amid one of the most cultured and prosperous communities in the world, men may look back to the gathering in Golden Gate park in this year of 1894 as the inauguration of an era such as never before was witnessed by the young and ambitious commonwealths of the further west.

**MIDWINTER FAIR MISCELLANY.**—In all respects save one the Midwinter Fair was a success, and that was from a financial point of view, though gate and other receipts were fully as large as had been expected. With the comparatively small amount subscribed in sums ranging from \$1 to several thousands of dollars, the results accomplished were most remarkable, the entire cost of buildings, grounds, and operating and other expenses being less than that of the hall of Manufactures and Liberal Arts at the Columbian Exposition. The largest buildings were erected in a very few months, and others in a few weeks, a few days sufficing for the construction of the smaller edifices. The attendance suffered from business depression and inclement weather during a portion of the term; but all who visited the Fair were pleased, and those who came from afar were surprised at this exhibition of the manifold resources and industries of the Pacific coast, for the first time grouped in combination and on an adequate scale.

Festivities and celebrations were as numerous at the Midwinter as at the Columbian Exposition, nearly every day of its term, Sundays of course excepted, being set apart for some state, county, nationality, or organization, or in honor of some historical event. In connection with the Fair was an emergency hospital, with physicians in attendance day and night, and an ambulance service fully equipped and always in readiness. The Midwinter Fair guard was enrolled as a special police force under military discipline, and organized by Colonel W. R. Shafter of the regular army.

Worthy of note among the incidents of the Midwinter Fair is the so-called "battle of roses," in which many counties participated, Alameda being especially prominent. A procession made the tour of the grounds, and there were floats covered with roses and car-

riages and horses decked with roses, all passing beneath arches wreathed with roses, erected at various points.

Among other Midway attractions not mentioned in the text is Boone's wild animal arena, where a lion standing in a chariot, with reins between his teeth, is drawn around the ring by a pair of tigers; a wolf is made to jump through a hoop, and goats, pigs, dogs, and cats are trained to their several tricks. In the Santa Barbara amphibion sea-lions and sea-otter are kept in a huge salt-water tank, whence they climb the steps and come floundering on the floor for the fish which their keeper offers. There is an ostrich farm or paddock in which it may be seen how a prominent industry of Southern Africa can be turned to advantage in California, where experiments have thus far proved unprofitable. Housed in a handsome pavilion is a group of St Bernard dogs, with 35 noble specimens from the Waldenberg kennels near Basle, one of them valued at \$20,000. In the Electric theatre is shown how electricity can be used for scenic effects. A weird exhibition is the Inferno, entered between the jaws of a dragon's head, with its burning lakes, its bottomless pits, and other suggestions of an imaginary place of torment. In the Moorish mystic maze the visitor enters a series of narrow corridors walled with mirrors so placed as to produce countless reflections of himself and to transform an individual into a ghostly multitude. The effect is bewildering as well as ludicrous; for once within there is no apparent outlet, and nothing to be seen except for the figure of a woman illusive as a desert mirage. Other attractions are the "haunted swing" and a clever illusion in "Egyptian hall," where a marble statue of Pharaoh's daughter, perfectly modeled and draped, is gradually transformed into a living woman, who descending from her pedestal gives assurance to the audience that she is alive.



# INDEX

NOTE.—As other world's fairs are briefly described in these pages, apart from that which forms the subject proper of the work, it will be understood that when not otherwise stated or inferred, the index references relate to the Columbian Exposition. The index has been prepared with a view to enable the subscriber to turn in a moment to anything he wishes to read. Thus if he would know what the city of Boston, the state of Colorado, or the empire of Germany has sent to the Fair, he will find reference made under the headings of "Boston," "Colorado," and "Germany," to all their more important exhibits. If he would refer to some section in one of the main divisions, as in the Agricultural or Fine Arts departments, he will find the exhibits classified by nationalities under "Agriculture" and "Fine Arts." And so with exhibitors and that which they exhibit, mention being made of individuals, associations, and groups or articles, with cross references covering the entire Exposition as described in *The Book of the Fair*. The names of exhibiting artists and of those who took part in the Congress Auxiliary are omitted, as they are several thousand in number.

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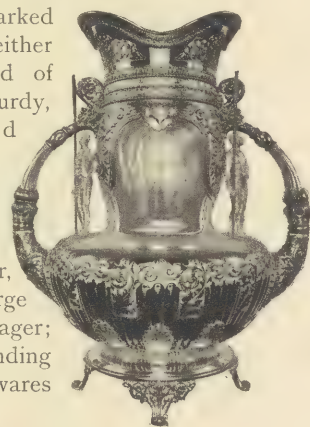
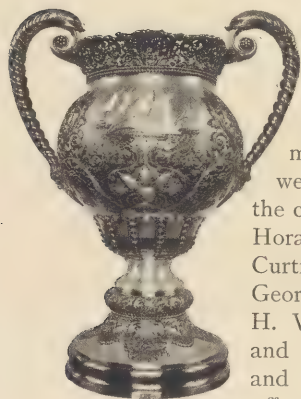
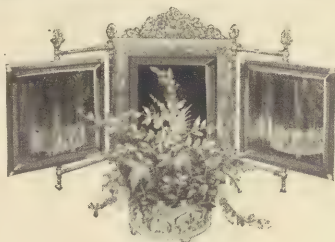
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BY HUBERT HOWE BANCROFT

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"Leaves nothing to be desired."—*New York Tribune*. "Of remarkable beauty and interest."—*Boston Traveller*. "A fitting memorial of the great event."—*Montreal Gazette*. "A work of art, and faithful reproduction of the great panorama."—*Ill. Australian*. "Mr Bancroft has already established his reputation as one of the most learned and industrious historians of the present day."—*London Academy*. "Chef d'œuvre of illustrative letterpress art."—*Liverpool Post*. "The work is, in a broad sense, priceless."—*New York Commercial Advertiser*. "A monument of well directed industry and great ability."—*Edinburgh Scotsman*. "The most valuable and interesting book of recent years."—*Rio de Janeiro (Brazil) News*. "In no other form will the Exposition be so fittingly portrayed."—*Boston Transcript*. "At once beautiful, portable, permanent, instructive."—*Industrial World*. "Style clear and concise, graphic and picturesque."—*New York Times*. "Style clear and without affectation, recalling the straightforward simplicity of Herodotus."—*London Westminster Review*. "A superb work of art."—*Rochester Herald*. "A splendid and enduring record."—*Buffalo Enquirer*. "A model of perfection and artistic beauty."—*St Paul Herald*. "Print and pictures in the highest style of art."—*Chicago Times*. "In the highest sense a work of art and utility."—*Chicago Globe*. "A valuable souvenir of the greatest of the world's wonders."—*Cincinnati Times-Star*. "A summary of modern civilization."—*New York Review of Reviews*. "A complete and perfect reproduction of the World's Columbian Exposition."—*Denver Evening Post*. "Felicitamos al Sr Bancroft por su magnifico trabajo."—*La Patria de Mexico*. "Well balanced in all its features, and deeply interesting."—*Philadelphia Ledger*. "Handsome in form, and complete in contents."—*Boston Journal*.

"It was a happy thought of Mr Bancroft's to reserve all this historically, descriptively, artistically, for the benefit of the present and for future generations."—*Boston Home Journal*.

"Nothing to be compared with this will be published about the Fair or has been, with reference to any preceding fair."—*Atlanta (Georgia) Southern Star*.

"The value of this work is beyond estimate. It is simply superb in every detail of execution."—*Riverside (California) Reflex*.

"Beautifully printed and illustrated on the best possible paper; altogether well gotten up. The only real attempt to fully print and reproduce the Exposition."—*London Vanity Fair*.

"America cannot reproduce anything finer; a high standard of excellence and pictorial art. Paper and letterpress in keeping with the general idea. Just as the display at Chicago is the greatest display of its kind, so the chronicle of it has been started in a manner that bids fair to outrank any similar adventure."—*Leeds (England) Mercury*.

"A handsome memorial of the Chicago Exposition."—*Glasgow Herald*.

"Everything about the work is first-class, and those who cannot visit the World's Fair, as well as those who can, will find it valuable for future reference."—*Windsor (Nova Scotia) Journal*.

"A perusal of the book and a look at its handsome illustrations will be the next best thing to seeing the fair itself."—*Victoria (B. C.) Times*.

"The very best illustrated description of the great show that will ever appear."—*Dallas (Tex.) Farm and Ranch*.

"It is a work that should be in every household, for it is really invaluable to those who desire to keep posted with the rise, progress, and end of the world's greatest Exposition."—*San Antonio (Tex.) News*.

"The biggest thing yet seen in the field of Exposition literature. We wish it the immense circulation on both sides of the Atlantic which such a valuable souvenir must command."—*Bangkok (India) Times*.

"The finest publication of the kind that has come to our table. The paper is first-class, illustrations and letterpress work are as fine as it is possible to make them. Every number is a veritable art gallery."—*Cleveland (O.) Leader*.

"To look through this publication is almost as good as a trip to the fair."—*New Orleans Picayune*.

"The text is accurate and dignified, and the whole work is a genuine delight."—*Chicago Post*.

"A work of great beauty and should be in every household."—*Chicago Herald*.

"All should secure the Book of the Fair. Those who attended, as a memento, and those who are kept away by adverse circumstances, as the only complete and perfect picture of the entire display."—*London (Ont.) The Echo*.

"The Book of the Fair is the most magnificent publication brought out on the Exposition, and is of great value."—*Herald, Utica, N. Y.*

"A book which, in years to come, will be regarded by its owner as a most interesting and valuable artistic reminder of the great exposition."—*St Louis Post-Dispatch*.

"The text covers every conceivable detail from start to finish, and the illustrations are a picture gallery in themselves."—*Chicago Journal*.

"Is a grand work, worthy the enterprise of this well-known publishing house. We unreservedly commend the work to all our readers, whether they have or have not visited the exposition."—*Washington (D. C.) Public Opinion*.

"The Book of the Fair is one of the volumes that every American will desire, as well as hosts of natives of other countries."—*Boston (Mass.) Ideas*.

"Beautifully illustrated with most admirably executed pictures taken from the most characteristic scenes, architectural and otherwise."—*Minneapolis (Minn.) Spectator*.

"It is really a work of art, and *The Tribune* which had persistently declined to lend its columns to praise of any of the various publications purporting to describe or illustrate the World's Fair, unhesitatingly commends the World's Fair Book as a meritorious publication."—*Knoxville (Tenn.) Tribune*.

"Presents in an attractive and accurate form the whole realm of art, industry, science, and learning as there exhibited by the nations of the world."—*London Times*.

"The letterpress is concise and accurate, giving exactly the information one would look for."—*Dublin (Ireland) Freeman's Journal*.

"If you did not go to the Fair, you should have Bancroft's 'The Book of the Fair.' If you did go, you should have it, for it affords an excellent medium for review."—*Kansas City Mail*.

"Can truthfully say it is the best book illustrating the great exposition that has yet been published, and we do not believe anything can be issued to surpass it."—*St Louis Park Mail*.

"The Book of the Fair cannot fail to become only second in popularity to the great Fair itself."—*La Porte (Ind.) Herald*.

"A more beautiful and complete record and souvenir cannot be imagined."—*Hartford (Conn.) Courant*.

"The work, like the Fair itself, is magnificent."—*San Diego (Cal.) Golden Era*.

"Mr Bancroft presents his material in attractive form. From a literary standpoint the work is above criticism."—*New Bedford (Mass.) Mercury*.

"Many books on the World's Fair have been published in the last few months, but the Book of the Fair has arrived latest with what is perhaps the most creditable representation the exposition has had up to this day."—*Springfield (Mass.) Union*.

THE BANCROFT COMPANY, Publishers

AUDITORIUM BUILDING, CHICAGO, ILL.

# THE BOOK OF THE FAIR

BY HUBERT HOWE BANCROFT

THE fact is established that the World's Columbian Exposition is the greatest of its kind, greatest not alone in dimensions, but as an exemplar of the progress of mankind. Nor is it probable that the present generation will see its superior as a display of the products of human endeavor, that by any nation or people it will be considered advisable, or pleasurable, or profitable, to expend the years of labor and millions of money requisite for a more extended showing of what man can do at his best. On the other hand the time may come when it shall not be deemed inexpedient to render continuous the World's Fair idea, when the strain on intellect and industry will not seem too severe to plant in some convenient spot a City of Civilization, perpetually to stand, enlarging with the enlargement of the mind, and yielding fruit of every kind.

However this may be, the present brilliant spectacle is upon us, in all its beauty and utility, a palpable and most interesting reality, and the question is how to make the best use of it, how to secure the fullest and most permanent results from the lessons it teaches. We may consider it from every point of observation, study it through the summer, and review it in the autumn, but we know how quickly vanish scenes caught by the eye and preserved only in the memory. With all our cold storage of learning in libraries, how little is really known to-day of the score or two of world's fairs held within the century at an aggregate cost of many hundred millions of dollars! Much that was beneficial remained, garnered in the intangible storehouses of human experiences, but how much more was lost! The cause is clear; there has never been a properly written history or description of any one of these remarkable exhibitions; there has never before been made what might justly be termed *THE BOOK OF THE FAIR*.

It is the purpose of the present work to supply this deficiency in the literature of world's fairs so far as the Exposition of 1893 is concerned. Great as will be the beneficial influences of this greatest of civic displays, nine-tenths of its benefits will form no lasting boon unless secured in some safer receptacle than the memories of men. Obviously, the best and most enduring form for the preservation of any kind of knowledge is a properly written and illustrated book, whose author entertains first of all an adequate conception of his subject, with the ability to present the same systematically arranged, and in clear and logical sequence. Pictures alone, however beautiful, however essential to the imparting of knowledge, are not of themselves enough; the intellect as well as the eye must be entertained. To produce the best results, the best talents of both author and artist must be brought into requisition, that what the mind receives through the eye may be impressed upon the understanding.

How far these aims and conditions have been fulfilled in *THE BOOK OF THE FAIR*, it is for the reader to determine. To say that no efforts have been spared, no time or money withheld which might tend to the achievement of the highest results, that the best artists who could be secured in Europe and America were brought to Chicago to illustrate the carefully prepared text of an author of established repute, would go for little did not the literary, artistic, and mechanical features of the work prove worthy of the labor and expense bestowed. The verdict of approval, however, we are receiving from every quarter, and the high approbation thus far bestowed by those most competent to judge, we shall endeavor to merit to the end.

Our best thanks are due to the officers of the Exposition, the heads of departments, and home and foreign commissioners, who have afforded us every facility in the prosecution of our work, particularly in the way of obtaining the latest and most accurate information.

*THE BOOK OF THE FAIR* is the only work in any wise attempting to reproduce in print the Exposition entire. In this respect it is without a competitor. It confines itself neither to art alone on the one side, nor to dry statistics on the other, but aims to present in attractive and accurate form the whole realm of art, industry, science, and learning, as here exhibited by the nations, so far as can be done within reasonable limits. The work will consist of 1,000 imperial folio pages, 12 by 16 inches, to be issued in 25 parts of 40 pages each, at the rate of about two parts monthly, and at the price of \$1 a part. It will contain over 2,000 of the finest illustrations, from official sources, many of them full page plates covering 102 square inches of surface.

For its superior excellence and artistic beauty, with cuts of the finest, and heavy paper of highest enameled finish, *THE BOOK OF THE FAIR* was selected by the Michle Company to be printed as an exhibit on their new improved press in the Machinery hall of the Exposition.

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